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INDEXED

Fruit and Ornamental Trees

Plants · Shrubs and Vines

WILLOWDALE NURSERIES

The Rakestraw-Pyle Co.
PROPRIETORS
KENNETT SQUARE, PA.

Directions for Transplanting

It is in the highest degree important that every cultivator of trees should understand the art of transplanting, as upon this operation depends, in a great measure, their feebleness or vigor afterward, their sluggish or thrifty growth, and, indeed, vitality itself.

WHEN TO PLANT.—The season for transplanting fruit trees is a matter upon which there is much difference of opinion, but as excellent results attend both spring and autumn planting, the cultivator may safely exercise his prejudice or discretion in favor of either. The best time is when the ground is best prepared and most fertile.

PREPARING THE SOIL.—Select a good, rich, dry soil, which is not subject to surface or spring water. If not naturally dry, it should be well underdrained. Pulverize the earth, and, if necessary, enrich it with manure, thoroughly mixing it with the soil. Let the hole be sufficiently large to admit the roots so that they may lie in their natural position, and have sufficient space in which they can readily start new growth.

PRUNING AND SETTING.—Examine the roots, and pare off all the wounded or broken parts with a sharp knife, cutting with a slope from the under side. Trim off one-third or one-half of the previous year's growth, and, there being fewer buds to start, those remaining will make a more vigorous growth. Place the tree in the ground so that it may not be more than an inch deeper after being planted than it stood in the nursery; take the finest earth and cover the roots, then work the tree up and down until the fine earth is fully incorporated with the small and large roots, so that no air-chambers may be left. When the roots are nearly covered, pour in a pail of water; this will bring the soil in contact with every fiber. After the water has settled away, fill up the hole with surface soil, pressing the earth firmly about the tree with the feet. If planted in the fall, bank the dirt up around the tree to a depth of a foot or eighteen inches, to prevent their blowing about, and shovel it away in the spring. If the trees are large, drive two stakes in the ground, east and west of each one, and with a straw band tie it securely.

CULTIVATION.—A young orchard should be well cultivated for several years. A vegetable crop—potatoes, etc.—is the best to raise among young trees, but a crop of grain or grass is always objectionable. The surface around the body of a tree may be covered with loose straw or any other coarse litter to the depth of several inches, spread around as far as the roots extend. This is called mulching, and is especially valuable the first season, as it keeps the ground moist in dry weather.

Trees may be planted in the fall as soon as the leaves have fallen, and any time in the spring, after the frost is out, until the buds begin to put forth.

TREATMENT OF TREES OR PLANTS THAT HAVE BEEN FROZEN IN THE PACKAGES, OR RECEIVED IN FROSTY WEATHER.—Place the packages unopened in a cellar or some such place, cool but free from frost, until perfectly thawed, when they can be unpacked and either planted or placed in a trench, covering the roots well up the stems with earth until convenient to plant. Treated thus, they will not be injured by the freezing. Trees or plants procured in the fall for spring planting should be laid in trenches in a slanting position, to avoid the winds. The situation should be sheltered, the soil dry, and the roots well covered with earth. A mulching on the roots, and a few evergreen boughs over the tops, will afford good protection.

DISTANCES FOR PLANTING

Standard Apples	30 to 40 feet apart each way.
Standard Pears and strong-growing Cherries	20 to 25 feet apart each way.
Duke and Morello Cherries	18 feet apart each way.
Standard Plums, Apricots, Peaches and Nectarines	16 to 20 feet apart each way.
Dwarf Pears and Quinces	10 to 12 feet apart each way.
Grapes	rows six feet apart.....6 to 8 feet in rows.
Currants and Gooseberries	3 to 4 feet apart.
Raspberries and Blackberries	3 to 4 by 7 feet apart.
Strawberries, for field culture	1 to 1½ by 3 feet apart.
Strawberries, for garden culture	1 to 2 feet apart.

NUMBER OF TREES TO THE ACRE WHEN PLANTED AT STATED DISTANCES

40 x 40 feet apart.....	27	18 x 18 feet apart.....	135	6 x 6 feet apart....	1,210
30 x 35 "	35	15 x 15 "	194	5 x 5 "	1,742
30 x 30 "	49	12 x 12 "	302	4 x 4 "	2,722
25 x 25 "	69	10 x 10 "	432	3 x 3 "	4,840
20 x 20 "	109	8 x 8 "	681		

RULES FOR OTHER DISTANCES

Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet for each plant or hill, which, divided into the number of square feet in an acre (43,560), will give the number of plants or trees to the acre.

MAR 9 1915

Office and Grounds at Willowdale Nurseries

INTRODUCTORY

The average home-owner, whether living in town or country, loves the effect of a well-planted lawn and a fruitful orchard, properly kept. Sometimes he admires these in some other home, wishing features like them for his own, but thinking them impossible because "he does not know how to order."

The purpose of this Catalogue is to make it easy for you to buy trees and plants for lawn and garden; to show by illustration and description how simple it is to buy the things you need most.

We have been in business ever since 1866, and the fact that we are constantly increasing our plantings of fruit and shade trees, vines and shrubs, proves that our customers like our stock and our methods of doing business.

Throughout our career we have tried to keep pace with our customers' requirements, as every successful Nurseryman should, offering our trade the best of the newer introductions.

With the issuing of this new Catalogue, we are ready to take care of all orders, large or small, given to us or to our agents. Fruit-growing is on the increase, and farmers are rapidly learning by actual demonstration that many portions of their land yield greater profits if planted to fruit than to other crops.

Our trees are clean, healthy, vigorous, true to name; they are carefully grown where soil and climate are the most favorable, and rarely fail to give entire satisfaction. Trees and plants from Willowdale Nurseries are growing throughout the Eastern States.

As to Our Agents

The traveling salesmen who represent us are personally known to us, and their integrity is above question. They are bound to act faithfully and impartially in the interests both of their customers and ourselves, and our friends may rely upon the claims they make for our stock.

It frequently happens that the customer is not familiar with the varieties of trees or plants, and is accordingly at somewhat of a loss to make the best selections: in such case the agent can often make helpful suggestions and will always be glad to assist in any way possible, when desired.

Parties entrusting their orders to our agents may do so with the full assurance that stock of the best possible quality will be supplied, and that the varieties called for will be furnished.

PRICES.—Prices upon trees and plants listed herein may be had upon application to this office or to any of our agents.

Should any information be desired after the agent has left your vicinity, or at any other time, do not hesitate to write us; we shall be glad to answer questions.

TERMS.—Orders from unknown parties must be accompanied by cash or satisfactory reference. Remit by Draft, Post Office or Express Money Order, or by cash in Registered Letter—**Please do not send personal checks.**

SUGGESTIONS FOR ORDERING.—Write your order clearly and distinctly; if for fruit, state whether standard or dwarf trees are wanted. Specify whether shipment shall be made by express or freight, and if railroad station is different from post office, state both. Sign your name and address plainly.

Purchasers of fruit trees are often at a loss to select the best varieties for their locality; whenever desired, we and our agents are glad to help in any way possible, by recommending such varieties as we believe, from our long experience, will prove of the greatest value to the purchaser.

Our friends are particularly requested to order early—do not wait till later, expecting to get the choicest of the stock. If a letter is enclosed with the order, please write it on a separate sheet of paper.

OUR GUARANTEE.—We make every effort to fill all orders accurately; should it be found, however, when plants reach their destination, that a mistake on our part has occurred, we shall be glad to be informed of the fact, and will do all in our power to adjust the matter to the customer's satisfaction.

We use the greatest care to have our stock reliable and strictly worthy, and will on proper proof, replace anything that may not prove true to name. We do not give any warranty. It is mutually agreed between the purchaser and ourselves that we shall not at any time be held responsible from any cause for more than the original cost of the trees.

OUR LOCATION.—Willowdale Nurseries are two miles north of Kennett Square, Chester County, Pa. Electric cars from Kennett Square to West Chester pass our office every hour. Our freight and express station is Kennett, on the Central Division of the Philadelphia, Baltimore and Washington Railroad, one of the Pennsylvania lines. We are about midway between Philadelphia and Baltimore, and have excellent shipping facilities, both by rail and water, from these cities.

Our soil and climate are admirable for growing first-class trees, and, with our long experience in the nursery business, we are well fitted to take care of your orders in a thoroughly satisfactory manner.

PACKING AND SHIPPING.—Goods will be securely packed in bales or boxes and will be delivered to the freight or express company in good condition, when our responsibility ceases, and goods travel entirely at purchaser's risk. Railroad and express companies are responsible after the goods are received by them.

Address all communications to

THE RAKESTRAW-PYLE COMPANY

Kennett Square, Chester Co., Pa.

Fruits

THE APPLE

With recent years there has come a remarkable development in the apple-growing industry, and the business has already grown to great proportions. For a long time it was thought that the production of apples on a successful commercial scale was to be limited to certain sections of the country, but growers now know that most places in the United States are good apple regions, and large orchards are accordingly being planted throughout the entire country.

As a rule, land that grows good corn will produce first-class apples, and in many instances tracts that are not available for other crops are ideal for orchards—hillsides, for instance, which, while too steep to grow field crops successfully, are excellent for apple trees, providing the necessary frost protection and drainage of soil.

From a careful view of the situation, we are convinced that the apple-growing industry is bound to develop rapidly in the next few years, and that those who plant liberally now will realize handsomely from it after the trees come to bearing.

We are giving careful attention to our apple trees, and offer in the following list an assortment of varieties that we know will succeed, both in the small orchard to produce fruit for home use, and in the large commercial plantings. We recommend these without hesitation, and if in doubt as to the best varieties to select for a given locality or purpose, we will be glad to help you make the selection.

In no case do we advise planting many varieties—it is better to determine upon two or three of the best kinds and grow them exclusively.

See "Spraying Hints," page 48, and "Directions for Planting and Caring for Trees," on the inside front cover.

Summer Apples

Cornell's Fancy. For qualities desirable in a late Summer Apple, cannot be excelled. Large, bright red, very attractive. Tree vigorous and productive. Profitable for market; ripens in August.

Summer Apples, continued

Early Colton. New, very early, ripening before Early Harvest. Medium to large; whitish yellow, tinted with red; quality excellent. First to middle of July.

Early Harvest (Summer Pippin of Maryland, Early June of Virginia). Medium to large, round; pale yellow; rich subacid. Tree moderate grower, erect and handsome; good bearer. July to August.

Early Ripe. Larger than Early Harvest; valued for early market.

Early Strawberry. Medium, roundish; yellow-white, striped with red; flesh tender, streaked with red; good grower and bearer. August.

Golden Sweet. Rather large; rich yellow; flesh juicy, tender, sweet. August.

Red Astrachan. Large round; nearly covered deep crimson, with a thick bloom like a plum; juicy, rich, acid. Tree vigorous, good bearer.

Sops of Wine. Medium; yellow, splashed with red, sprinkled with gray dots; flesh white, pleasant, subacid; strong grower; productive. August and September.

Starr. Good healthy grower; fruits young; an abundant and annual bearer. Fruit large, pale green, frequently with blush. Good shipper; good for eating and cooking. July to September.

Summer Hagloe. Large; striped bright red. Flesh coarse, tender, juicy, subacid; valuable for market. August.

Summer Queen. Large, conical, deep yellow, shaded red; flesh yellow rich, and of good flavor. Tree vigorous. August.

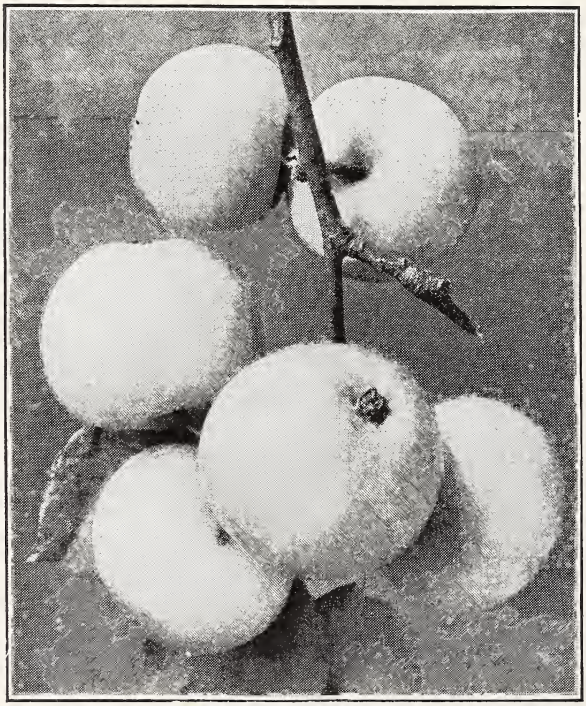
Summer Rambo. Large; flattened; yellow, beautifully striped with red. Flesh tender, rich, mild; far superior to common Rambo in size and beauty; very productive. September.

Sweet Bough. Large; pale yellow; valuable for market. Tree compact grower, abundant bearer. July to August.

Townsend. Very fine; red striped; excellent quality. August to September.

Williams' Favorite. Large, handsome oblong; dark red, good quality. Early.

Yellow Transparent. Russian. Clear white, pale yellow when matured. Flesh tender, juicy, subacid; quality good. Good grower, early bearer. July.



Yellow Transparent Apple

Autumn Apples

Fall Pippin. Large, roundish, flattened; yellow, tender, rich, delicious. Tree vigorous grower and good bearer. October to December.

Gravenstein. Superb size and appearance. Bright yellow, dashed with bright red and orange; tender, crisp, high-flavored. September.

Jefferis. Chester county, Pa. Handsome and of excellent quality; medium size; skin yellow, shaded with crimson; regular bearer. September.

Autumn Apples, continued

Jersey Sweeting. Often large; striped with red; flesh yellow, sweet, and good. One of the most desirable. September and October.

Maiden Blush. Much cultivated for market; valuable for cooking and drying. Clear lemon-yellow with blush. Rapid-growing tree. September.

Munson Sweet. Medium to large, roundish, pale yellow, with blush; tender, sweet, of fine flavor. Tree robust and hardy. October to December.

Oldenburg. A large, beautiful Russian Apple. Roundish; streaked red and yellow; tender, juicy and pleasant. Tree a vigorous grower and an early bearer. Succeeds well in the Northwest, where many varieties fail. September.

Orange Pippin. New Jersey. Vigorous, moderately productive. Fruit above medium, roundish; skin orange-yellow, with gray dots and patches of russet; flesh yellow, juicy, subacid, pleasant. September and October.

Porter. Rather large, regular, oblong; clear, glossy, bright yellow, with dull blush. Flesh rather fine-grained, juicy, sprightly, agreeable, aromatic, subacid. Very good. September.

Rambo. Medium flat; skin yellowish white, streaked with red. Flesh tender, fine-flavored. Tree vigorous and productive. October to December.

Smokehouse. A valuable apple of fine size and handsome appearance. Skin yellow, shaded red. Ripens in September and October.

Winter Apples

American Golden Russet (Bullock). Medium; yellowish russet; high-flavored, juicy, good keeper. Tree erect, productive. December to March.

Baldwin. Rather large, striped red on yellow; mild, rich, subacid; vigorous grower, bears abundantly. Profitable for market. November to March.

Belmont. Also known as the Gate. Large, conical, lemon-yellow; flesh tender, juicy, crisp; bears profusely. November to January.

Brandywine. A valuable early winter apple. Supposed to be seedling from Smokehouse. Early and abundant bearer; flavor subacid, rich, juicy. November to February.

Esopus Spitzenberg. Large; red, with gray specks; flesh firm, rich, spicy; grows slowly, moderate bearer. November to April.

Fallawater. Very large, skin smooth; yellowish, with dull red cheek; flesh fine-grained, mild subacid; fruit uniformly fair. Tree vigorous, prolific, profitable. November to January.

Grimes' Golden. Of highest quality. Medium to large, yellow; tree hardy, vigorous, productive. January to April.

Hubbardston. Large, round; yellow and red; tender, juicy, delicious. Tree strong and productive. November to January.

Jonathan. Medium, yellow, striped red; flesh white, tender, juicy. Abundant bearer. November to March.

King of Tompkins County. Large and fine; skin yellow, marked red; rich subacid. Tree vigorous. November to January.

Major. A showy market Apple of excellent quality. Tree rapid, vigorous grower; fruit large, roundish; color green, striped and splashed with red. Flesh crisp, juicy, rich.

McIntosh Red. Canada. Trees commence bearing early; fruit medium size; white and yellow, striped with dark red. Flesh tender, juicy, slightly acid. November to April.

Morris' Sweet. Pa. Fruit large roundish; skin yellow, striped red. One of the most valuable sweet apples. November to February.

Northern Spy. Large, roundish, skin dull red and green, flesh subacid, of first quality. Tree productive. December and January; keeps well into June. North of Pennsylvania.

Northwestern Greening. Tree a strong grower, productive. Fruit large, dull green, yellow at maturity; flesh yellow, juicy, rich acid. Quality very good for table. September to November.

Nottingham Brown. Large, dark red, very attractive; sells at high prices; quality excellent. September to March.

Pennock. Large, bright red, covered with gray dots. Vigorous and productive. December to March.

Mammoth Black Twig Apple

Winter Apples, continued

Pewaukee. Medium size, round-ribbed; bright yellow, and red; flesh yellowish white, juicy, subacid. Hardy. December to March.

Rhode Island Greening. Popular for market. Fruit very juicy, acid. Bears early, abundant. Not good south of middle Ohio and Pennsylvania.

Rome Beauty. Large roundish; light yellow, striped with bright red. Good for Pennsylvania. Nov. to Feb.

Roxbury Russet. Above medium; greenish yellow-russet; long-keeper and very productive; valuable for market. Strong grower.

Sutton Beauty. Large; roundish; yellow, striped crimson; flesh tender, subacid, good. Tree productive. December and January.

Wagener. Medium size, dark red; flesh tender, subacid, excellent; an abundant bearer and good grower. December to March.

Wealthy. Minnesota. Hardy, vigorous and productive. Medium size; red striped white; quality good. December to February; a fall apple in Pennsylvania.

Westfield. An old favorite dessert apple. Fruit of medium size, creamy-yellow overlaid with red. Rich, mild flavor.

Winter Banana. Golden yellow, with slight blush or tint of red. Excellent flavor, delicious eating, and splendid cooking.

Winter Sweet Paradise. Rather large; greenish white, with blush; rich, sweet. Tree vigorous, productive. November to March.

Yellow Bellflower. Yellow. Flesh crisp. Large, and juicy, of sprightly flavor. November to April.

Late Winter Apples

Bismarck. Germany. Large, roundish, flattened; whitish yellow, streaked bright crimson, very handsome. Tree bears early. Juicy, rather acid; excellent for cooking. December.

Ben Davis (Kentucky Red, New York Pippin). Large, roundish, beautifully striped and splashed bright red on yellowish ground. Tender, juicy, mild. Tree hardy, vigorous; constant and abundant bearer. Winter and spring.

Cooper's Market. Medium, conical; striped red on yellow. Flesh white, tender, subacid; tree hardy and productive. December to May.

Dominie. Resembles Rambo. Flesh white, tender and juicy, sprightly, pleasant flavor. Trees are rapid growers and free bearers. April.

English Russet. Medium; pale yellow, with russet; firm, crisp, mild, long keeping. Tree vigorous, productive. Keeps till June.

Gano. Superior to Ben Davis which it closely resembles in fruit and tree; brilliantly colored, uniform, keeps well. Tree vigorous, hardy, a rapid grower, bears while young, and gives large annual crops. Fruit is bright red, large and uniform. February to March.

Lawver. Heavy and hard; fruit dark red; large, roundish, subacid; very valuable as a late market sort. Tree vigorous, hardy, bears well. January to June.

Late Winter Apples, continued

Lankford. Large, red-striped, good; valuable for South. Tree hardy, bears every year. Keeps until May or June.

Mammoth Black Twig (Paragon and Arkansas). Similar to the Winesap; tree is more vigorous, hardy, and fruit is much larger. Color dark red, flesh firm and a splendid keeper. Flavor mild, pleasant subacid. January to May.

Nero. Large, handsome and a good keeper. No orchardist in Maryland, Delaware or the South can afford to be without it.

Red Romanite (Gilpin). One of the best winter apples for planting south of Pennsylvania. On a good soil the fruit is of fair quality and size, and holds on the tree until late. An excellent keeper.

Smith's Cider. Medium to large; greenish white, striped with red. Tender and crisp, mild flavor; grows slowly but prolific. Very popular, late keeper. December to March.

Stark. Late keeper, valuable for market. Large; skin greenish yellow, splashed with red. Flesh mild, subacid, good. January to May.

Stayman Winesap. Similar to Winesap, but very much larger and of better quality. The fruit is striped bright red; quality best. Last of November to April. Tree vigorous.

Tolman. Medium; yellow, with a pale blush; flesh excellent. Tree vigorous and productive. December to April.

Winter Strawberry. Medium size, striped red, sprightly subacid. Late keeper.

Winesap. Good for dessert and cider, a great favorite. Regarded in the South as the best keeping Apple. November to May.

York Imperial. Large, smooth, irregular; skin greenish, nearly covered with red. Flesh crisp, juicy; has a sprightly, agreeable acid flavor. Tree hardy and productive; very profitable. February to April.

York Stripe. Large, oblong, striped with crimson on yellowish ground. Flesh white, tender, juicy, subacid. Handsome and late keeper; productive. December to April.

CRAB APPLES

General Grant. Small, round; yellow, striped red. Flesh white, fine-grained, mild subacid. Late autumn.

Hesper Blush. Same size as Transcendent; greenish, with red cheek; good quality. October to December.

Hyslop. Fruit large, produced in clusters; roundish ovate; dark, rich red. Tree hardy, vigorous.

Martha. Small, bright glossy yellow, shaded with light red; flavor mild tart. Good for sauce and dessert. A rapid grower and great bearer of beautiful, showy fruit. October to November.

Red Siberian. Small, bright red, with a light bloom. Excellent for preserves.

Transcendent. Fruit large, roundish, flattened; golden yellow, striped crimson; flesh yellow, crisp, subacid. September and October.

Whitney. Large, striped, almost red; flesh yellowish white, very juicy, subacid. Excellent for eating, canning or cider. Tree vigorous. August.

Yellow Siberian. Small, pale, yellow, with light blush; valuable for preserving.

Hyslop Crab Apple

Dwarf Pear Tree

THE PEAR

Farmers and fruit-growers have not been giving Pear-growing the attention it deserved; nowadays, however, as the fruit becomes more and more popular at market, larger orchards are being planted. The demand is good, and the prices received make it a profitable business. Standard pear trees come to bearing about as soon as apple trees, and sometimes earlier.

Trees from 4 to 6 feet high are considered the best size. Select a well-drained loam, rich and deep.

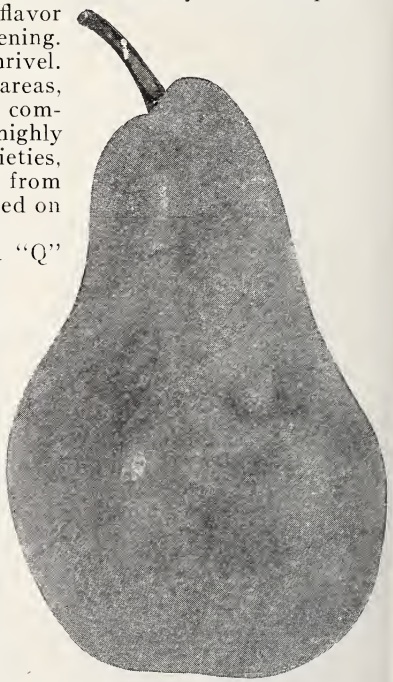
Early pears should be gathered about ten days or two weeks before fully ripe, and laid on shelves or in shallow drawers in a cool room. They will mature gradually when cared for in this way, and will be found much better flavored than if tree-ripened.

Winter pears should remain on the trees till first frost. Then gather them, wrap each pear separately in paper, and pack carefully in boxes, storing in a cool room, free from frost. After a couple of weeks remove them to a warmer room where they will develop a finer flavor in ripening. Be sure to keep them wrapped, or they will shrivel.

Dwarf Pears are good for planting in limited areas, as in back yards, small gardens, etc. They commence bearing early, and we recommend them highly for such places. With a proper selection of varieties, a regular succession of fruit may be secured from earliest to latest. Our Dwarf Pears are budded on Angers Quince.

The varieties in the following list marked "Q" succeed well also as dwarfs.

See "Directions for Planting and Caring for Trees" on the inside front cover, and "Spraying Hints," page 48.



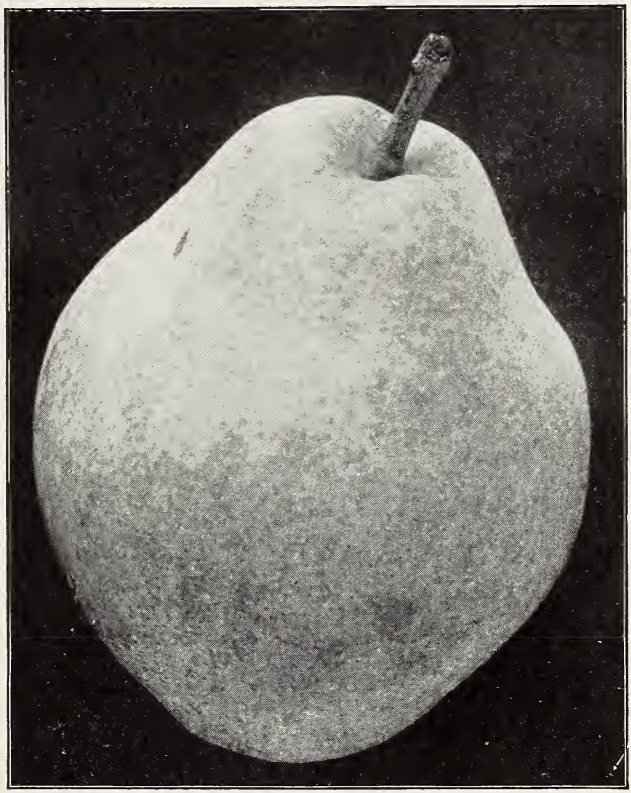
Bartlett Pear

Summer Pears

Bartlett. Large, clear yellow; juicy, melting, delicious. Remarkable for early and abundant bearing. August and September. (Q.)

Clapp's Favorite. Fruit large, uneven; flesh white, fine-grained, juicy, buttery, rich, sweet, vinous, slightly perfumed. Resembles the Bartlett, and ripens earlier. August and September. (Q).

Doyenne D'ete. Small; clear yellow, shaded with red; juicy, sugary and rich; one of the best early Pears for dwarfing, and very fine in its season. Ripens here in the middle of July. (Q.)



Kieffer Pear

Summer Pears, continued

Koonce. A new variety highly recommended. Of medium size, yellow, with bright carmine blush; quality good. Vigorous and early. June and July.

Manning's Elizabeth. Medium size; bright yellow, with red cheek; flesh white, juicy, melting. August.

Wilder. One of the earliest; a good keeper and shipper. Fruit small to medium; bell-shaped, smooth; pale yellow, shaded brownish red; flesh pale, fine-grained, tender, very good.

Autumn Pears

Anjou. Large; light green, shaded dull crimson; rich, melting, vinous. Vigorous grower; productive. October and November. (Q.)

Clairgeau. Very large, sometimes weighing 20 ounces; russet, with reddish cheek; melting, juicy. A splendid variety. October.

Duchesse d'Angouleme. Very large, often weighing a pound; greenish yellow, with some russet; very juicy and rich. October. (Q.)

Flemish Beauty. Large, greenish yellow, with some russet; melting, sweet and rich; bears early and abundantly; gather early. Late September.

Garber. Tree upright, nearly or quite free from blight. Fruit yellow, larger than Kieffer, better in quality, and four weeks earlier.

Howell. Large; clear yellow; quality fine; vigorous. September. (Q.)

Kieffer. Large; deep yellow; flesh white, coarse, juicy, quality variable. Excellent for canning and a most profitable market variety, ripening after others are gone. Immensely productive; comes into bearing very young.

Le Conte. Fruit large, smooth, pale yellow, good; ripens about two weeks before Bartlett. Tree vigorous, rapid-growing, prolific.

Autumn Pears, continued

Louise Bonne. Large, pale green; juicy and melting, with a rich flavor. September and October. (Q.)

Rossney. Medium to large; fine grained, melting and juicy; sweet. Two weeks after Bartlett.

Seckel. Small; yellowish, with a dull red cheek; quality the best. Tree a moderate grower. September and October. (Q).

Sheldon. Medium to large; yellow, russet and red; melting, rich; tree vigorous and handsome; very excellent. October.

Vermont Beauty. Desirable dessert pear; hardy and vigorous. It nearly equals Seckel in quality; is prolific and a good keeper. Fruit medium size, yellow, with carmine blush. Middle of October.

Worden-Seckel. Seedling of Seckel; more juicy and equally delicious. Tree hardy, productive and free from disease.

Winter Pears

Lawrence. Large, yellow; rich and high-flavored. Tree hardy and very productive. The most desirable of all Winter Pears. Dec. and Jan. (Q.)

Mount Vernon. Medium to large; skin yellow, and russet; juicy, melting, aromatic. Tree vigorous, bears early. November to January.

Rutter. Medium to large, nearly globular; skin rough, greenish yellow; flesh white, juicy, sweet. An early and abundant bearer. Oct. and Nov.

THE QUINCE

The fruit planting of every home should include a few Quince trees; there is almost always a ready sale for the fruit, and when the trees are properly looked after it is not hard to make them succeed.

To produce the best results the trees should be cultivated frequently, and given a top-dressing of manure each year. Placing a peck of leached ashes from time to time about the base of each tree will help to keep borers from the roots.

Apple, or Orange. Large, orange-shaped, excellent; one of the finest of the old varieties. Trees bear young and are productive.

Bourgeat. A new, golden, prolific variety of the best quality, ripening shortly after Orange and keeping until mid-winter. Tree a remarkably strong grower.

Champion. Tree strong, free grower; comes in bearing second or third year; productive. Flesh cooks tender, free from lumps or cores. Fruit large, equal to Orange. Ripens about two weeks later, and keeps till February.

Meech's Prolific. Fruit very large, handsome and attractive, of delightful fragrance and flavor; cooks tender.

Meech's Prolific Quinces

The healthy growth of our Peach trees, as shown in illustrations on this and the next page, proves that we know how to grow them

THE PEACH

The first secret of growing good Peaches is in the planting of good trees; everybody enjoys this delicious fruit, and may have an abundance of it by giving the trees proper attention.

From the many varieties of Peaches we have selected those that we have found to be best, and offer them here with accurate descriptions. These trees are healthy seedlings, budded from trees that we know to be free from "yellows" or other disease. We do not advise planting too many varieties; and if in doubt as to the best kinds for your neighborhood, we will gladly recommend those that will do best for you.

Peach trees will thrive in almost any well drained, light, open soil, but care must be taken to select one with as much protection as possible against frost. Frequent cultivation, the use of plenty of fertilizer, and regular spraying to keep down disease and insects, particularly San José Scale, are important to the successful growing of Peaches.

It is necessary also to keep a sharp lookout for the "borer," which works at the roots near the surface of the ground, and is easily located by the thick gum which appears on the bark. When this is seen, the worm may be easily dug out with a knife or other sharp instrument; a better way, however is to *prevent* the laying of eggs from which the borer is hatched.

This can be done by heaping a little mound of wood ashes about the base of the tree. The lye in the ashes will not only keep out the borers, but will also drive out root lice, ants, etc. Another good way is to apply a strong solution of lime-sulphur to the trunks of the trees with a hand spray pump, or with a paint brush.

Peach trees should be planted about 20 feet apart, and trimmed early the first spring after planting, so they will "head" low. After this, it is only necessary to remove unnecessary branches, so as to admit plenty of sunlight and air to all parts of the tree, to properly ripen the fruit.

Another block of Peach trees growing at Willowdale

The Peach, continued

When trees set heavily, the fruit should be thinned, as the Peaches that remain will ripen with better color and flavor and be much larger and more salable.

See "Spraying Hints," page 48, and "Directions for Planting and Caring for Trees," on the inside front cover.

Extra Early Varieties

Admiral Dewey. Perfect freestone; ripens with Triumph; flesh yellow, of uniform texture and color to pit.

Triumph. Tree vigorous, very productive; fruit medium to large, round. Skin yellow with rich, red blush all over the sunny side; flesh yellow; ripens evenly to the pit; freestone. A good keeper and shipper; superior in quality to any other variety ripening near its season.

Early Varieties

Greensboro. The largest and most beautifully colored. Of good quality; juicy, freestone, adhering slightly; ripens perfectly to the seed.

Third Ripening

Champion. One of the hardiest and most reliable varieties. Large size and good quality; skin rich, creamy white, with red cheek; flesh firm, rich, juicy, a perfect freestone. Ripens with Early Rivers.

Early Rivers. Large; pale yellow, delicate pink cheek; flesh melting rich flavor.

Waddell. Very hardy; bears when others fail. Fruit medium to large, rich creamy white, with bright blush, often covering two thirds of the Peach. Flesh rich, sweet; freestone; almost as large as Oldmixon.

Fourth Ripening

Carman. Large, oblong, resembling Elberta; the best flavored early Peach known. The skin is tough, making it just the Peach to ship a long distance. The trees will succeed in wet soils where others fail.

Foster. Round yellow freestone, fully as large as Crawford's Early, better quality, uniform size; ripens with Early York, or before Crawford's Early.

Large Early York (Honest John). Large; skin white, dotted red, bright red cheek; flesh juicy, rich and excellent. Late August.

Mountain Rose. Very valuable; high color and fair size; flesh white, juicy, rich, excellent. One of the most attractive.

Troth's Early. A good shipping fruit; early. Holds an important place.

Yellow St. John. Nearly equal to Crawford's Early; more productive; freestone.

Peaches, Fifth Ripening

Crawford's Early. Magnificent yellow-fleshed variety; highly desirable for market; the trees are moderate growers and very productive; fruit is small to medium, highly colored; between Large Early York and Oldmixon Free.

Captain Ede. Very large, yellow freestone, with a delicate carmine on one side. Ripens with Crawford's Early, one week before Elberta; good shipper.

Elberta. One of the most popular commercial peaches ever introduced. Very large; golden yellow, striped with red. Flesh yellow, of fine texture, juicy and of remarkably good flavor.

New Prolific. Ripens close to Crawford's Early; pit small. Often bear heavy crops when all others fail. Very hardy.

Sixth Ripening

Chinese Cling. Large roundish oval; skin creamy, mottled red; flesh creamy, juicy and melting, of a rich agreeable flavor. July to August.

Crosby. Medium size, round; bright yellow, with crimson splashes and stripes; flesh yellow, red at stone, juicy, subacid, rich. Ripens just before Crawford's Late. Unusually hardy, abundant and regular bearer.

Fitzgerald. Canada. About as large as Crawford's Early; pit small, flesh rich golden yellow. Very good; extremely hardy.

Kalamazoo. A strong grower; size uniform; pit small; flesh yellow and of fine quality; skin yellow, with red cheek. Tree hardy and reliable bearer. Ripens between Crawford's Early and Late.

Niagara. In many respects similar to Elberta; resembles Crawford's Late. Yellow, of high quality; ripens between Elberta and Crawford's Late.

Oldmixon Free. A superior market fruit; ships, grows, produces well; fruit uniformly large, good flavor and color.

Reeves' Favorite. Large, roundish; yellow, with red cheek; flesh yellow; red at stone, juicy, vinous; hardy.

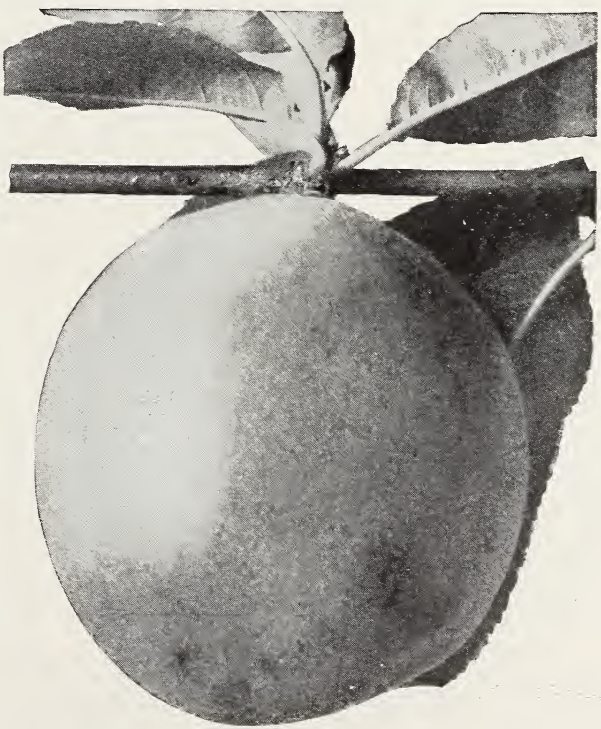
Wheatland. Fruit large, quality best; deep golden yellow. An excellent shipper, and valuable for market; freestone. Ripens between Crawford's Early and Late.

Seventh Ripening

Albright. Magnificent white, freestone. Flesh white, juicy, sweet, melting. Reliable; hardy and yielding when many others fail. Last of September.

Belle of Georgia. Large; white, with red cheek; flesh white, firm and excellent; fruit large and showy; free.

Crawford's Late. Best of its season; yellow-fleshed. Unsurpassed in quality, and as a profitable market fruit.



Belle of Georgia

Peaches, Seventh Ripening, continued

Fox Seedling. Valuable Peach, desirable for large size, fine quality, good for shipping and market. White; freestone; red cheek; productive.

Globe. Very large; globular, rich golden yellow, with red blush. Flesh firm, juicy, rich. An improvement on Crawford's Late. Late September.

Morris White. Fruit medium; oval; skin creamy white; flesh white to the stone, juicy and sweet; good for preserving. Ripens with Crawford Late.

Oldmixon Cling. Large, round; white, with red cheek; flesh pale, very rich and high-flavored; one of the best.

Red-Cheeked Melocoton. A famous old variety. Fruit large, yellow with red cheek; juicy, rich, vinous; productive. Freestone.

Stevens' Rareripe. Large; white, shaded and mottled red; flesh white, juicy, vinous, of high quality. Freestone. Begins to ripen with the last of the late Crawfords, and continues from three to four weeks. Hardy; a heavy and regular bearer.

Stump the World. Very large; creamy white, with bright red cheeks; flesh white, juicy and high-flavored; very productive. One of the best market varieties.

Susquehanna. Very large; orange-yellow, almost covered with red; flesh yellow, with high flavor; freestone. One of the finest of our large Peaches.

Eighth Ripening

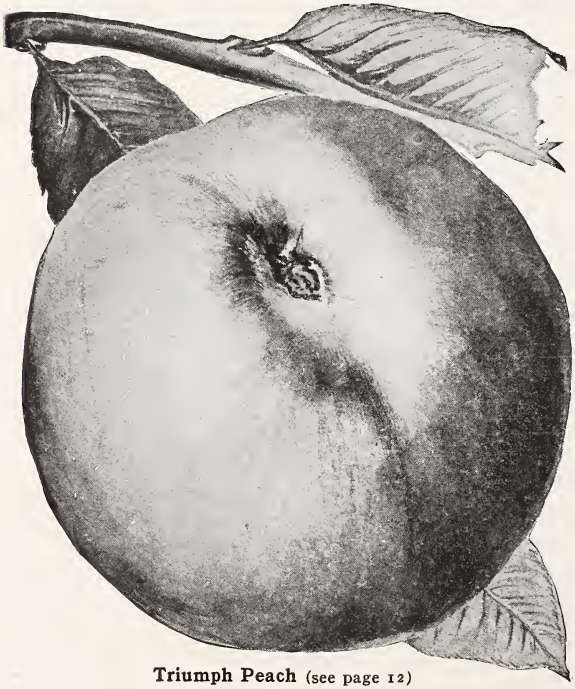
Beer's Smock. One of the most profitable market varieties, especially for the northern section of the Peach-growing district. Fruit yellow, mottled red, large, second in quality; an enormous bearer, and excels as a shipping fruit. Tree hardy, vigorous.

Chair's Choice. Maryland. A fine yellow freestone; rich color, splendid flavor; excellent for canning. Ripens between Crawford's Late and Smock.

Hill's Chili. Fruit rather large, oblong; skin dull yellow; flesh yellow, very rich and sweet; stone small. Tree productive and hardy. Early October.

Ninth Ripening

Ford's Late. Large, white, sweet and solid. Tree vigorous, productive; requires thinning.



Triumph Peach (see page 12)

Iron Mountain. New Jersey. Tree vigorous and productive. Freestone; large; pure white; flesh white, solid, juicy, sweet. October.

Klondike. Large, white, with brilliant red cheek. White flesh, sweet, juicy, delicious, free.

Salway. Large; skin bright yellow, mottled with red; flesh yellow and red, excellent quality. Hardy; profuse bearer. Ripens after Smock.

Wonderful. Exceedingly large, regular, uniform; rich golden yellow and carmine. Ripe in central New Jersey the second week in October; keeps three weeks after it is gathered.

Wilkins, or Ringgold Mammoth Cling. A white-fleshed cling, ripens with Late Heath, but is almost double its size, and should be planted instead. Profitable for market, bringing good prices.

Burbank Plums

THE PLUM

Like other fruits, the Plum requires special cultivation to develop it properly but, as in other cases, such attention pays well and makes this a profitable fruit to raise. The trees thrive best in a rather heavy soil, and do well when planted in back yards or in poultry runs.

The principal enemy of the plum is the curculio, which may be held in check by spraying—see page 48—or by shaking the branches early in the morning.

If the latter method is followed, spread a cloth under the tree to catch the insects and infected fruit that fall. Strike the tree with a mallet or similar instrument padded in such a way as not to injure the bark, and carefully destroy all insects and fruit found on the cloth afterward.

With ordinary care, plum trees will live and bear profitable crops for many years.

Bradshaw. Very large; dark, violet-red; juicy and good; tree vigorous and very productive. July.

Coe Golden Drop. Very large; light yellow; rather firm, rich, sweet and good; adheres to the stone. Tree moderately vigorous and productive. Last of September.

German Prune. Fruit large; dark purple, with blue bloom; flesh firm, sweet, pleasant; a very valuable fruit, bearing enormous crops. September.

Grand Duke. Fruit oval with a short neck. Skin dark to reddish; blue bloom. Flesh yellow, adhering to stone; sweet rich flavor.

Gueii. Very large; dark purple; hardy and productive; popular in plum-growing regions. Late Sept.

Imperial Gage (Flushing Gage, Prince Imperial Gage). Large, oval greenish; fruit juicy, sweet, agreeable; free. Tree vigorous and productive. Valuable for market. August 15.

Plums, continued

Lombard. Medium size; delicate violet, dotted thick red; flesh deep yellow, juicy. One of the hardiest and most valuable Plums. Succeeds well everywhere, very productive. August.

Monarch. Fruit large, dark purple, nearly round. Flesh pale yellow, freestone, pleasant, juicy and first quality. An early and regular bearer.

Moore's Arctic. Valued for its hardiness and freedom from curculios; dark purple; of fine flavor, very prolific.

Pond's Seedling. Large oval; reddish violet; a little coarse, very juicy and sweet, tree vigorous and productive. September.

Prince Engelbert. Large; deep bluish purple, with a dense bloom; flesh juicy, melting, rich; freestone. Late August.

Reine Claude de Bavay. Large; greenish yellow, spotted red; flesh firm, juicy, sugary, rich, of fine quality. Slightly clingstone; vigorous, productive. September.

Shipper's Pride. Fruit large, dark purple; flesh firm and of excellent quality. September 1 to 15.

Yellow Gage. Large, yellow, oval; flesh yellow, juicy, and rich. Tree vigorous and productive. An excellent and profitable variety. Middle of August.

The Japan Plums

This new race of Plums has created a new interest in Plum culture. The trees begin bearing early, and are very productive in after years. There are many different varieties, varying in size, quality and time of ripening. The varieties described below we believe to be the very best. The trees are hardy and vigorous, and seem well adapted to all sections.

Abundance. Tree handsome, thrifty and hardy; begins bearing young, and produces large crops in great profusion. Large, oblong, nearly covered with bright red; flesh yellow, sweet, juicy, excellent. The most popular Plum in the list. Aug.

Apple. Deep reddish purple, in shape and size like a medium-sized apple; flesh red, firm, keeps and ships well. Strong-growing, with large foliage. Ripens after Burbank.

Burbank. Fruit large, roundish, clear red, with thin bloom; flesh yellow, sweet, with agreeable flavor. Tree vigorous, beginning to bear at two years old. August.

Climax. Large, heart-shaped, rich, early; flesh yellow, sweet and delicious.

Hale. Originated with Luther Burbank. Bright orange, mottled cherry-red; handsome, large, round, flesh yellow; quality good; keeps well. Very promising. Late September.

Ogon. Trees vigorous and hardy. Fruit large, roundish; bright yellow with faint bloom. Flesh firm, rich, sweet and dry; freestone. Excellent for canning; one of the earliest. Late July.

October Purple. Abundant crops of large, round, reddish purple plums of good quality. Large and strong-growing; best for late market.

Red June. Medium to large; deep red, very showy; flesh light lemon-yellow, firm, juicy, of good quality; semi-cling; pit small. Tree vigorous and productive; one of the earliest.

Satsuma. Large; purple and red, with rich blue bloom; flesh firm, juicy, dark red; quality fine; pit small. Hardy and vigorous. August.

Wickson. Another Burbank introduction. Color deep red; flesh firm, dull yellow, with an aromatic flavor; an upright grower. Keeps and ships well. One of the latest.

Wickson Plum

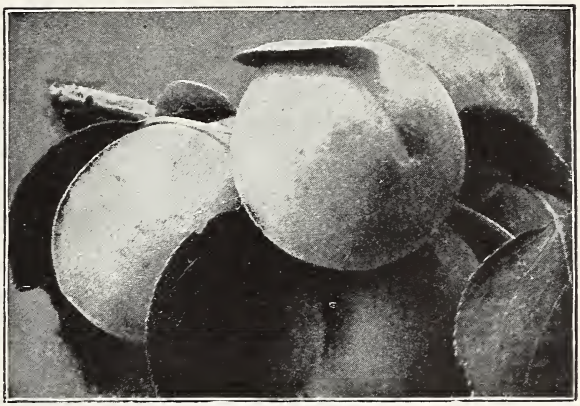
THE APRICOT

The Apricot is one of the most beautiful of the stone fruits, resembling the plum in shape, but is downy like a peach, and partakes largely of its excellence and flavor. It requires the same management as the plum to protect it from curculio.

Breda. Below medium size; dark orange; rich, juicy, sweet, high-flavored; productive. First of August.

Early Golden. Medium, pale orange; flesh yellow, juicy, sweet and good; vigorous and productive grower. Early in July.

Harris. Fruit large, rich golden yellow, with a faint blush on the sunny side; of first quality, and a perfect freestone. It is an early and abundant bearer. As large as the best grown in California and better in quality. July 1 to 15.



Harris Apricots

Moorpark. Large; orange, brownish-red in the sun; flesh firm, juicy, rich, luscious. First of August.

Peach. Very large; yellow, with orange cheek; juicy, melting and rich; considered by some the best of all; very vigorous and productive. Last of July to first of August.

Royal. Large; skin dull yellow, with orange cheek; flesh pale orange, firm, juicy, free from stone. July.

St. Ambrose. A large early Apricot, almost the size of Moorpark and earlier; deep red, of excellent quality.

The Russian Apricots

This fruit was brought to the United States by the Russian Mennonites. It has proved to be universally hardy, to bear annually and abundantly, and some of the varieties produce fruit of size and flavor unequaled by European or American sorts.

Alexander. Tree hardy; an immense bearer. Fruit large, oblong, yellow, flecked with red, sweet, delicious. July 1. One of the very best.

Alexis. Tree hardy, and abundant bearer; fruit medium to large, yellow, with red cheek; slightly acid, rich, luscious.

J. L. Budd. Hardy, strong grower and a profuse bearer; large white, with red cheek; sweet, juicy, extra fine, with a sweet almond kernel; like the best late variety and a decided acquisition. August.

NECTARINES

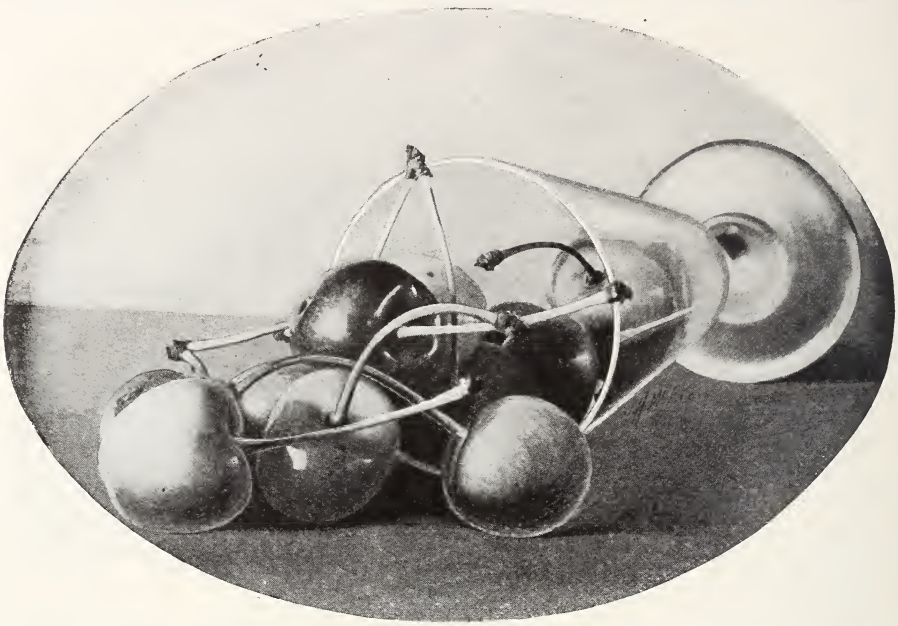
The Nectarine is an accidental variety of the peach, with a smooth, thin skin, like a plum. It requires the same soil and culture as the peach, and the same attention as the plum and apricot, to protect it from the curculio. Fruit wax-like, and one of the best for dessert. Plant trees 12 to 16 feet apart.

Boston. The largest of the Nectarines. Bright yellow, deep red cheek; flesh yellow, sweet and pleasant, though not rich. Early Sept.

Early Newington. Large; pale green blotched red; juicy, rich, sweet. One of the earliest; probably the best.

Elruge. Medium size, pale green, with deep violet cheek; melting, juicy, rich flavor. Early September.

Pitmaston's Orange. Large; yellow with red cheek; quality good. Late August. Appearance handsome, commands highest prices at market.



Napoleon Bigarreau Cherries (see page 19)

THE CHERRY

Although it will thrive in a variety of soils, the cherry does best in a dry sandy or gravelly loam. If planted in wet or poorly drained soils, the trees quickly decay and die. When well established, cherry orchards are very profitable and markets are rarely overstocked. Good prices may nearly always be realized from Cherries, especially when attractively put up.

In the following list, the varieties are divided into two classes: **Heart and Bigarreau, and Duke and Morelio.** Cherries of the Heart and Bigarreau class, both light and dark, are sweet-flavored. Dukes and Morellos are more or less acid. We have selected the following varieties for their good qualities and recommend them highly. See "Directions for Planting and Caring for Trees," on the inside front cover, and "Spraying Hints," page 48.

Heart and Bigarreau Cherries

Bing. Oregon. Flesh solid, black, flavor of the highest. Tree thrifty, upright, hardy and productive. A fine shipping and market variety.

Black Tartarian. Very large; bright glossy, purplish black; half-tender, juicy, rich and fine. Tree vigorous, upright grower and great bearer. Early June to late July.

Dikeman. The latest ripening sweet Cherry known; commands high prices. Large, black, fine quality; handsome, prolific, a good keeper and shipper. Originated in Michigan.

Downer's Late. Large, smooth, light red; tender, juicy, sweet, delicious. Hangs long on the tree and is not subject to rot in wet weather, as are many varieties. Tree hardy, vigorous regular and very prolific. Middle of July.

Ida. One of the hardiest Cherries known. Fruit medium to large; pale yellow, nearly covered with light red, some mottled; flesh tender, juicy, of fine quality. Tree vigorous, upright, abundant and regular bearer. Middle of June.

Heart and Bigarreau Cherries, continued

Elton. Large; pale yellow, spotted with red next to sun; juicy and rich. One of the best light-colored Cherries; a spreading but vigorous grower. Middle of June.

Gov. Wood. Large; yellow, shaded with red; juicy, rich and delicious. A strong and productive grower. Middle of June.

Napoleon. Large; white, with red cheek; a very firm, juicy and sweet Bigarreau Cherry of great excellence and one of the most profitable for market. First of July.

Schmidt Bigarreau. Remarkably hardy and productive. Fruit grows in clusters and is of the largest size; deep black. Flesh dark, tender, juicy, with a fine rich flavor. July.

Rockport. Large; amber and light red; half-tender, sweet, rich and excellent. Tree vigorous, erect, beautiful and productive. Last of June and first of July.

Windsor. Large; very dark; firm, solid, rich and good; a vigorous, hardy tree and very prolific. Ripens latter part of July.

Yellow Spanish. Large; yellow, with some red in the sun; firm, rich and delicious. Last of June.

Duke and Morello Cherries

Trees are of slow growth and rather small, bear freely.

Dyehouse. In hardiness and general appearance resembles Early Richmond, but is of finer quality and several days earlier; it produces very regular annual crops. Fruit medium; skin bright red, darkened in the sun; flesh soft, juicy, tender, sprightly, subacid, rather rich. Very productive.

Early Richmond. Of medium size; dark red; melting, juicy, sprightly, acid; the stone adheres to the stem with remarkable tenacity. Unsurpassed for cooking purposes. Tree a slender grower, with a roundish, spreading head, and is exceedingly productive. One of the most hardy varieties. Ripens through June.

English Morello. Large; dark purplish red; juicy, rich and acid; a remarkably productive sort, ripening at the end of the Cherry season. A notable improvement over the "Common Morello." First of August.

Late Duke. This fine Cherry follows the May Duke. Fruit large, obtuse, heart-shaped, rich, dark red; flesh tender, juicy, sprightly subacid. Last of July.

May Duke. Large, dark-red; tender, melting, very juicy, rich and excellent. The most popular and profitable of all Duke Cherries. Tree hardy, vigorous, upright, productive. Middle of June.

Montmorency. A cherry of the Richmond class, but larger and more solid. Tree a more upright grower, equally hardy and a heavy cropper; blooms from 7 to 10 days later than Richmond.

Olivet. A new variety of French origin. Large, globular; very shining, deep red; flesh red, tender, rich and vinous; very sweet, subacid flavor. Ripens middle of June and continues until July.

Ostheim. A native of Russia and very hardy. Tree a medium grower; fruit large, roundish oblong, very dark when ripe; flesh reddish, tender, juicy, good. Ripens quite late.

Early Richmond Cherries

THE GRAPE

Every home needs its grapes, and since the vines will grow so readily in almost any location, they should never be omitted from the fruit planting.

Grape-vines thrive in nearly all soils. They may be trained over a trellis or upon a fence, and require little attention, except ordinary fertilization, cultivation and an occasional spraying. Directions as to the latter will be found on page 48.

When the fruit is set it is a good plan to enclose each in a paper sack, the mouth of which is gathered and pinned closely around the stem, just above the "shoulder" of the cluster. This keeps out insects, dust, dirt, etc., but does not hinder the maturing of the fruit, which ripens with a finer color and flavor than if left directly exposed to the sun.

See "Directions for Planting and Caring for Trees," in the inside front cover.

Agawam (Rogers' No. 15). Vigorous and productive; bunches large and quite compact; berries large, dark red and juicy. Ripens about first of October.

Brighton. In color, form of bunch and berry resembles Catawba, combining the sprightliness of that variety with the richness and sweetness of Delaware; vine vigorous, hardy and productive. A most desirable early variety for family use.

Campbell's Early. Of strong, hardy, vigorous growth and thick, heavy, perfectly healthy foliage. Ripens early and bears large and handsome clusters of excellent quality; keeps and ships well. Matures from middle to last of August, according to season. Ripens with Moore's Early. Cluster and berry are large, glossy black, with blue bloom; pulp sweet and juicy; seeds small, few in number and part readily from the pulp.

Catawba. Berries medium large; deep red, covered with a lilac bloom; juicy, sweet and rich.

Clinton. Bunches small and compact; berries small, black, sprightly; keeps well. One of the most rapid growers and profuse bearers.

Concord. Where the more delicate and finer varieties have utterly failed, this has produced abundant crops. Berries large black; flesh juicy and sweet; vine hardy and vigorous.

Delaware. Bunches small and compact; berries below medium size. Skin thin; flesh tender, juicy and sweet, with scarcely any pulp. Vine hardy and productive. The highest flavored native Grape known.

Grapes, continued

Eaton. Bunch large, compact; berries large, round, black, covered with thick blue bloom. Bunch and berry strongly resemble Moore's Early. The skin is thick as Concord. Very juicy, with tender pulp. Not as sweet as the Concord. Vine vigorous and prolific.

Empire State. A white Grape producing handsome clusters. Ripens early, is very productive and of excellent quality. Vine hardy and vigorous. One of the best.

Green Mountain. Extra-early, greenish white; skin thin; pulp tender and sweet; contains few seeds, which separate readily from the pulp; quality superb. Hardy, vigorous and productive.

Lady Washington. Vine very vigorous, hardy, productive; bunch very large and compact. Berries medium to large, round, deep yellow, with a tinge of delicate pink, flesh soft, tender, juicy and very good. Ripens with Concord.

Moore's Diamond. Delicate greenish white with rich yellow tinge; juicy, rich, sweet and sprightly, with a soft, tender pulp. Bunch and berry medium size and moderately compact; hardy and strong grower.

Moore's Early. One of the best early Grapes. A seedling of Concord and as vigorous and hardy as its parent, ripening 10 days or two weeks earlier. Bunch large; berry large, round, black, with a blue bloom; quality good.

Niagara. White. Bunch large, handsome, sometimes shouldered, compact; berries large, skin thin, but tough; flesh sweet and of good quality; good shipper; a vigorous grower and very productive. Medium early.

Pocklington. A seedling of Concord. The vine is thoroughly hardy both in wood and foliage; strong grower; never mildews in vine or foliage. Fruit light golden, clear, juicy, sweet to center. Bunches very large, sometimes shouldered; berries round, very large, thickly set. Ripens after Concord.

Salem. Dark red; bunch large, compact, shouldered; berries large, round, skin thick and firm; flesh very sweet, tender, with a rich, aromatic flavor. Vine moderately vigorous, hardy, healthy, ripens earlier than Concord when not permitted to overbear.

Worden. Bunches handsome, large, double-shouldered; berries large, sweet. Ten days earlier than Concord, and ripens well in cold localities. Vine thrifty and vigorous.

Niagara Grapes

NOTE.—We particularly invite the attention of our patrons to the very favorable conditions which prevail here for the growing of trees and plants. Chester county, Pennsylvania, is well known as one of the best farming sections of the United States, and this fertile soil, together with our improved methods of developing first-class trees, enables us to produce stock that any one may well be proud to plant.

Trees and plants from Willowdale Nurseries will succeed well when planted either north or south of us.

The Small Fruits

Those who make a business of growing fruit for market, as well as farmers and others who produce it merely as a "side issue" are rapidly learning the value of the small fruits, and the profits awaiting those who grow them.

There *is* money in Strawberries, Raspberries, Blackberries, Currants, etc.; the numerous "small fruit farms" in the neighborhood of our large cities *prove* it. The demand is good and prices remain high throughout the season.

Besides those growers who make a specialty of small fruits, there are many others who produce them in connection with apples, peaches, pears, etc.,—and here is an idea that many other growers may follow to good advantage.

The large fruit trees require some years—five or more—before they come to profitable bearing; an excellent way is to plant Strawberries or other small fruits between the rows and thus crop the land profitably from the first. The cultivation given the small fruits is good for the trees, too, and when the latter begin bearing and need the land, the berry plantings can be moved elsewhere.

We invite your attention to the following varieties of small fruits, which comprise a strictly up-to-date and reliable list. Some varieties that we have found unworthy have been taken out, and new and valuable sorts have been added. We commend these lists to your consideration, knowing that you will be well pleased with whatever you select from them.

THE STRAWBERRY

There is practically no location East, West, North or South where the Strawberry will not thrive and bear freely; it seems to be "at home" in almost every kind of soil. The plants will bear *some* fruit without attention; but the returns in more and larger fruit richly repay the grower for the pains taken in cultivating and caring for them.

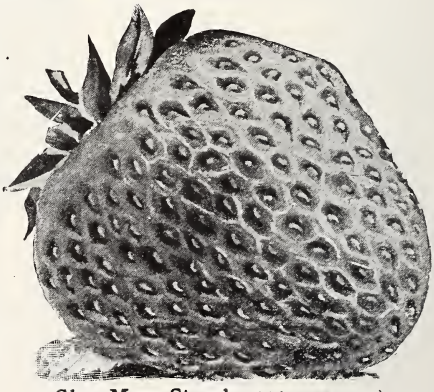
To prepare a strawberry bed, dig the soil deeply and prepare trenches 3½ feet apart. The plants may be set from nine to eighteen inches apart in the row. Cultivate freely, and unless the "matted" row is desired, keep runners pinched off; this will throw the strength of the plant into producing berries. Planting should be done in spring or early summer, and the vines will bear the following spring. New beds should be set out each year, and the old vines plowed under after two or three years of bearing, as after this time the fruit begins to "run down" in size and quality.

We are personally familiar with the varieties in the following list, and recommend them without reserve. Those marked (P) are imperfect-flowering kinds and will not bear unless planted near a variety not so marked, so that the necessary pollen may be carried to them by bees and the wind.

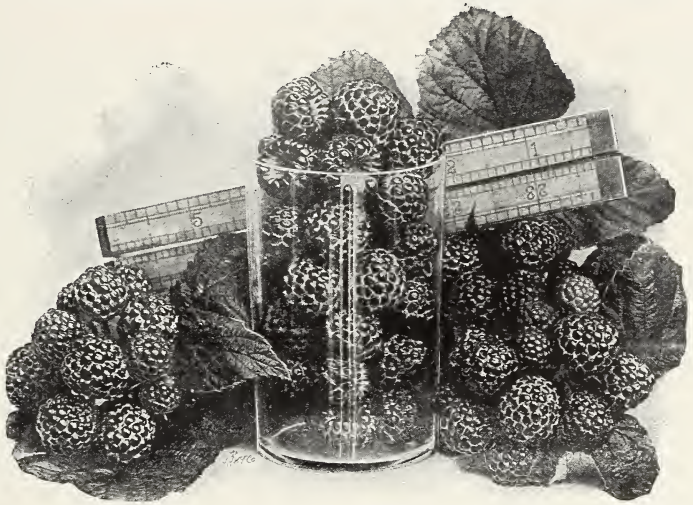
Brandywine. Perfect blossom; fruit colors all over. Berries are very large, nearly always of regular, conical form; color bright glossy red; flesh firm and of excellent quality. One of the best late sorts.

Bubach (P). The plant is large, dark green and an enormous bearer. Fruit very large, bright red and ripens all over; of roundish or conical form, sometimes uneven on the surface.

Chesapeake. Late, very productive and an excellent shipper. In quality, one of the very best—as large as Gandy. Plant a strong grower; leaves free from rust. One of the most desirable, either for home or market.



Glen Mary Strawberry (see page 23)



Cumberland Raspberries

Strawberries, continued

Gandy. A reliable late variety; berries bright crimson, very uniform in size and shape, large and firm; plants vigorous and healthy.

Glen Mary. Berries large, often flattened; bright, deep red on surface, light red to center; sweet, rich and good; season medium to late. One of the most productive and holds its size well to end of season; plant vigorous. One of the best for home use and nearby market.

Sharpless. Average specimens measure 1½ inches either way. Berries clear, bright red, with smooth, shining surface; flesh firm, sweet and of first-rate quality. Plant vigorous, hardy and productive; will grow on nearly all except very light soils.

Wm. Belt. A well-tested variety that is giving remarkable satisfaction as a large, handsome, productive berry for market or home use. Vigorous, thrifty, heavy plant, producing large crops under good common matted-row culture. Berries large, conical, uniform; brilliant, glossy red; ripens all over without green tips; of good quality; carries well to market and brings highest prices.

THE RASPBERRY

On account of the market demand for first-class Raspberries, the growing of this fruit is a profitable industry. One drawback, however has been the fact that the berries were too soft and crumbled too easily to ship successfully for long distances.

The newer varieties have largely overcome this, however, and several of those in the following list will be found just as desirable for market purposes as for home use. Sixty bushels per acre is considered a fair average yield.

The vines should be planted 2 to 3 feet apart in the row, and rows should not be closer together than 6 feet. Spraying is beneficial; see "Spraying Hints," page 48.

Cardinal. This is a remarkably hardy variety. It has withstood a temperature of 26 degrees below zero, without injury. One of the most productive varieties. Color a little darker than Columbian; a little more acid, berry rounder, as large or larger.

Columbian. A most vigorous grower; roots penetrate to a great depth, enabling it to resist drought. Propagates from the tips. Fruit large, —sometimes an inch in diameter— dark red, bordering on purple; adheres firmly to the stem; sprightly flavor.

Raspberries, continued

Cumberland. A cap variety of fine size; very productive; quality good. The plant is very hardy and is a strong, vigorous grower. Ripens a little in advance of Gregg.

Cuthbert, or Queen of the Market. A remarkably strong, hardy variety; stands the northern winters and southern summers equal to any. Berries very large, measuring 3 inches around; conical, rich crimson, very handsome, and so firm that they can be shipped hundreds of miles by rail in good condition; flavor is sweet, rich and luscious. The leading market variety for main crop.

Golden Queen. A yellow Raspberry, seedling of the Cuthbert. It is very productive and hardy. Berry is large, of beautiful color and excellent quality; medium to late, and continues long in bearing. An excellent garden berry.

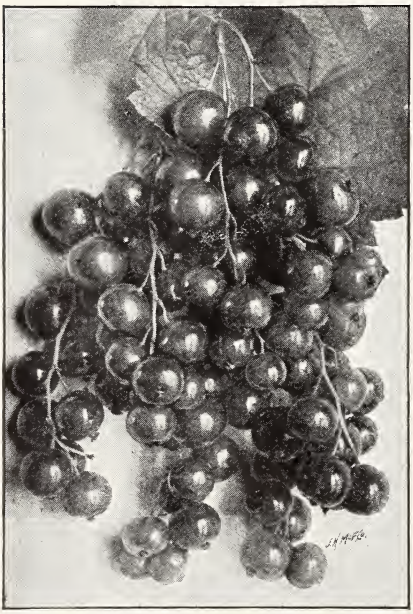
Gregg. This is a dark purple berry, very large, early; crop ripens in about two weeks—an advantage to the market grower; canes hardy, fruit of good quality; an enormous bearer; propagates from tips.

Japanese (Wineberry). Ornamental both in fruit and plant. Canes covered with purplish red hairs. Leaves dark green, silvery gray beneath. Fruits in large clusters and each berry is at first tightly enveloped by the large calyx, forming a sort of bur, which is covered with purplish red hairs. These gradually open and turn back, exposing beautiful wine-colored fruit of medium size, brisk subacid, retaining flavor when cooked. Highly esteemed for canning, preserves, jellies, etc.

Kansas. A strong, vigorous grower, standing extremes of drought and cold and bearing immense crops. Berries size of Gregg; of better color, jet-black, almost free from bloom, firm, of best quality, handsome; brings highest price in market. Early.

Loudon. Plant hardy and vigorous with few thorns. Berries firm, bright red; can be shipped long distances. Productive; of excellent quality. Medium to late.

Miller. Berries of medium size, bright red; good, all-round berry for family or market. Very profitable, being a good shipper. Ripens early.



Fay's Prolific Currant (see page 25)

THE CURRANT

The Currant has great vitality, and will give some fruit under almost total neglect, but to have the fruit in perfection, plant in rich, deep soil, and give good annual pruning and cultivation.

The pruning, if the plants are allowed to grow to "stools," consists merely in removing such of the older and feebler shoots as crowd and overtax the plant. If grown as a tree, on a single stem, remove a portion of the bearing wood to increase the size and beauty of the crop, and keep all suckers from the bottom. Four feet apart each way is about the proper distance to plant. See "Spraying Hints," page 48.

Cherry. Fruit of largest size, deep red, rather acid; short bunches; growth strong, stout, erect; short-joined shoots.

Currants, continued

Fay's Prolific. A justly popular variety, of large size; very productive; bears early. Fruit is bright red, of good quality, less acid than the Cherry. Valuable for market and home use.

Lee's Prolific. Earlier than Black Naples, with very large berries; larger, longer clusters and even more prolific than that free-bearing kind. Quality superior. Of special value for jellies and jams, and for planting in the north.

Perfection. A new Currant as large as or larger than Fay's, the clusters averaging longer. A beautiful bright red; rich, mild, subacid; few seeds; a good grower; very productive. Long stems.

Pomona. Not so large as Cherry or Fay's Prolific, but is of good size. It is a beautiful clear bright, almost transparent, red, has but few and small seeds, is easily picked, and hangs a long time after ripening. A hardy, vigorous grower, exceedingly productive, and of the best quality.

Versailles. Very large, long, red bunches of great beauty and excellent quality. Very productive.

White Grape. Very large; yellowish white; sweet, or a very mild acid; of excellent quality, and valuable for the table. The finest of the white sorts. Of spreading habit and dark green foliage; very productive, and a most delicious and delicate table fruit of great beauty.

Wilder. Very large, light red; superior for table, canning or market; enormously productive; flavor delicious, mild acid.

To destroy the currant worm, which affects alike both Currants and Gooseberries, spray the bushes thoroughly. See "Spraying Hints," page 48.

THE GOOSEBERRY

The Gooseberry loves a deep, rich, rather cool soil. The plants require to be annually and rather severly pruned, to thin them out and to increase the size of the fruit.

A liberal mulching of manure tends to prevent mildew, which is very liable to injure all the foreign sorts, but seldom affects the American seedlings.

In all American seedling varieties great improvements have been made by the introduction of the new sorts named below. See "Spraying Hints," page 48.

Downing. Medium to large, oval, greenish white. Plant vigorous, upright, very productive; excellent.

Houghton's Seedling. Vigorous, very productive and free from mildew; pale red; medium size.

Industry. An English variety, large and productive; dark red, good quality. It has been found better adapted to our climate, and less liable to mildew than most of the European varieties yet introduced.

Joselyn Red. Very large, smooth berry; quality best and foliage best and most healthy of any Gooseberry known. It is the one large, red Gooseberry that can be planted with confidence of success by all lovers of this fruit.

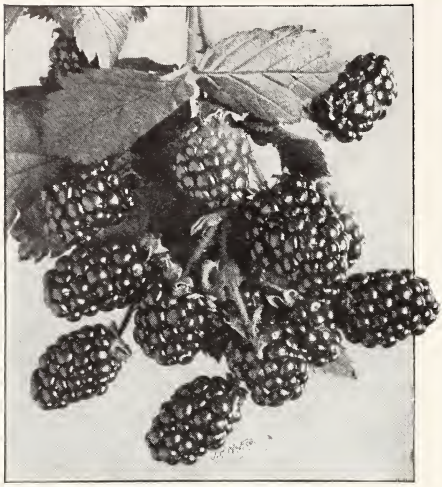
Smith's Improved. Fruit large, oval light green when ripe, sweet and excellent. Plant vigorous, extremely productive, hardy and healthy.

THE BLACKBERRY

Plant in rows 6 to 8 feet apart, and 2 to 4 feet apart in the rows. Cultivate the wide space well, and cut the tops off the tall plants, which causes them to grow strong enough to stand without support. Eighty bushels to the acre is an average yield in field culture.

Eldorado. Canes vigorous, hardy; heavy bearing. Berries large, jet-black, borne in clusters, sweet, melting and pleasant; no hard core; a good keeper.

Erie. Fruit is round, of the largest size, of excellent quality, handsome, firm, and ripens between Early Harvest and Wilson's Early. The berries



Eldorado Blackberries

Blackberries, continued

are unusually uniform in size and shape, there being scarcely any small or imperfect berries. It is also superior for canning. Canes very hardy and prolific.

Kittatinny. Has the habit of continuing long in bearing, and yielding its fruit through a period of six to eight weeks. Very large and productive, and of good quality.

Lucretia Dewberry. Large, fine-flavored, without core; very productive. The canes are slender and trail on the ground like the common Dewberry. Train them on an A-shaped frame, or place some support, like brush, underneath to keep them from the ground.

Rathbun. A strong, erect grower that roots from tips like blackcap raspberries. Particularly hardy, and a heavy bearer. Fruit sweet, of extra high flavor, very large, jet-black, with small seeds. A recent introduction and very promising.

Taylor. A large fruit, melting and without core. Equally as hardy and productive as Snyder wherever tried, being much larger, a great favorite in sections where a large, hardy kind is wanted.

Ward. A new Blackberry of great merit. A seedling of the Kittatinny, which it resembles somewhat. A very strong grower; it is perfectly hardy. The fruit is black throughout and very prolific, firm, and good for shipment, yet tender and melting, and of highest quality. A very promising new variety.

Wilson. Indispensable to every market grower on account of its extreme earliness, ripening its crop before peaches take the sway of the market, and out of the way in from two to three weeks.

THE MULBERRY

Valuable as an ornamental shade tree, and the fruit is much liked in many sections. Plant in deep, rich, sandy loam. The tree requires little or no pruning, and is of easy culture.

Downing's Everbearing. This very delicious variety originated from seed of *Morus multicaulis*. It has the strong, vigorous habit of that species, and produces large fruit of a purplish-black color. The flesh is juicy rich, sprightly and delicious. Very productive, and ripens its fruit in succession for a long time.

New American. Fruit large and of fine quality; tree rapid-growing and very hardy; it bears delicious fruit from middle of July until autumn.

Russian. Tree hardy and a rapid grower; specimens 6 years old are 20 feet high and 6 to 8 inches in diameter; very prolific, beginning to fruit when three years old. Berries good for dessert and jellies; the leaves are often used for raising silk cocoons.

THE PERSIMMON

Our native variety has fruit similar to the plum, yellow when ripe, and sweet after exposure to frost.

The Nut Trees

The development of nut culture during the last few years has been very marked. It is an industry well worthy the attention of planters. Aside from the crops, which are very profitable, most kinds make a valuable growth of timber, which would of itself pay well on the investment. On almost every farm there are places not well adapted to farming, that would suit admirably for growing nuts, and would show handsome returns.

ALMOND

Hard-Shell. A fine hardy variety, with a large plump kernel. Exceedingly ornamental when in bloom.

HICKORY

Shellbark. Too well known to need description. The trees should be transplanted when small.

CHESTNUT

American Sweet. A valuable native tree, useful and ornamental. The timber is very durable and has a fine grain for an oil finish. Nuts sweet, of delicate flavor, and are a valuable article of commerce. No farm should be without its grove of nut-bearing trees, and the Chestnut should be foremost wherever the soil is adapted to its growth. Valuable for shade and ornament as well as for its nuts.

Japan. Larger than the American; sweet and very prolific; bears early.

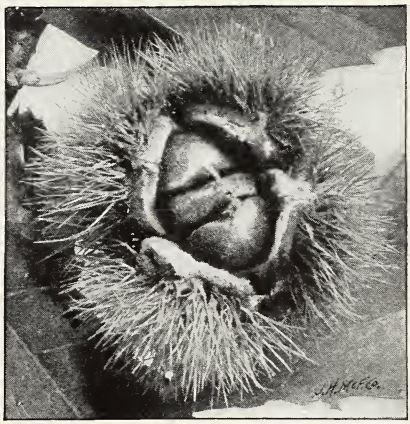
Numbo. Very hardy and an immense bearer. Nuts large and of good quality; ripens early, usually before frost, and sells at high prices. Begins bearing when quite young, and is very regular with its large crops.

Paragon. A magnificent variety. Tree vigorous, upright, a hardy and abundant bearer; nuts large and of excellent quality—three or more in a bur. Supposed to be a seedling of the Spanish. One of the most popular large nuts.

Spanish. A hardy, handsome, rapid-growing tree; bears early and abundantly. The nuts are large and sell at a good price, though not so sweet as the American.

BUTTERNUT

A rapid, lofty grower, producing large, longish nuts, with sweet kernels of good flavor.



Paragon Chestnut

FILBERT

English (Hazelnut). Of very easy culture, entirely hardy, succeeding in almost all soils; bears early and abundantly, and is one of the most profitable and satisfactory nuts to grow. The nuts are nearly round, of excellent flavor, and liked by all for dessert.

PECAN

The Pecan is better adapted to Southern states, where it bears profitable crops. Our trees are of the finest variety, bear transplanting well and will produce the best "paper shell" nuts, sweet and delicious to the taste.

WALNUT

Black. The well-known native species; hardy, prolific and valuable. The wood takes a splendid finish; in point of durability and beauty it is difficult to excel.

English. This rich and fine-flavored nut is quite hardy with us, and makes a vigorous growth; well worthy of cultivation.

Nut Trees, continued

JAPAN WALNUTS

This species is found growing wild in northern Japan and is hardy as an oak. The nuts, which are produced in extreme abundance, grow in clusters of 15 or 20, have a shell thicker than the English Walnut, but not so thick as the black Walnut. The meat is sweet, of the very best quality. The trees grow with great vigor, need no pruning and bear young. Having an abundance of fibrous roots, they transplant safely. We have two varieties, as described below.

Sieboldi. Oblong. Like the Butternut in quality, but smaller, with smoother and thinner shell. The nuts are produced in clusters. Should be extensively planted.

Max Cordiformis. The nuts of this variety differ from nuts of the Sieboldi, being broad-pointed and flattened, resembling the shellbark very much in shape.

The Vegetable Roots

The vegetable roots listed here grow readily with very little care and should have a place in every garden. A few roots will supply the average table and if more is grown than is needed, the surplus can generally be sold in the neighborhood or at market for a good price.

ASPARAGUS

One of the earliest and finest of vegetables; the delicious tender tips are much in demand in early spring. To plant, dig the ground deep, spading in plenty of well-rotted manure; plant the roots 10 to 12 inches deep, and about a foot apart in the rows. As a market vegetable, Asparagus is among the most profitable of any, and we now have an extra fine supply of strong roots to offer commercial growers. When planting extensively, the ground should be well enriched with rotted manure, and then plowed and harrowed till very mellow. Rows should be 4 to 5 feet apart, and furrowed 10 to 15 inches deep; plants should be located from 15 to 20 inches apart, and covered with 3 or 4 inches of mellow soil. As they grow, cultivate and pull in more soil, working the same as celery. Cultivate regularly to keep out grass and weeds.

Barr's Mammoth Asparagus

Conover's Colossal. More generally cultivated than any other variety. The shoots are large, very tender and good.

Barr's Mammoth. Very valuable as a market variety. Its handsome light green color and large size make it very attractive, so that it sells readily at a higher price than other varieties. It makes no shoots too small for marketing, and much time is thus saved in cutting and bunching.

Giant Argenteuil. Extensively grown in France, but has become adapted to our soil and climate. It is noted for its earliness, productiveness and immense size of stalks. Remarkably healthy.

Palmetto. Of southern origin. Very early, quite large, very prolific; uniform in size, and of good quality.

RHUBARB, or PIE-PLANT

Another very early vegetable; the thick, tender stalks provide the best of material for pies and tarts, and are excellent for canning. Plant the roots in rich, mellow soil, worked deep.

Linnaeus. By far the best of all varieties.

Ornamental Department

No matter how simple the home, it is to the best interest of every owner to "dress up" the grounds in a way that will make it as attractive and homelike on the *outside* as the good housekeeper loves to have it in the *inside*.

The bare, unattractive "front yard" is fast becoming a thing of the past, as people are learning how easy it is to entirely change the appearance of the home with trees, shrubs, and vines—a few dollars' worth is often all that is necessary.

We pay special attention to the growing of trees that will make attractive homes, and invite your attention to the following lists of Decidous Trees and Shrubs, Hedge Plants, Evergreens, Roses, Vines, etc. The descriptions and illustrations will aid you in selecting suitable varieties and our agents will gladly offer helpful suggestions if desired.

Deciduous Trees and Shrubs

Plant at any time in the spring after the frost is out of the ground, until the foliage starts; in autumn, any time after wood and foliage have ripened, until the ground freezes. Cut all bruised and broken roots off smoothly beyond the point of injury and prune back the top to correspond with the root pruning necessary.

UPRIGHT AND WEEPING TREES

ACER (Maple). The Maples are clean and vigorous in growth and adapt themselves to many soils. Their outlines are shapely and graceful and the foliage, in most cases, colors brilliantly before it falls.

A. Colchicum rubrum (Red Colchicum Maple). The young growth of this tree is bright red in May and in August, when a second growth appears. It grows slowly to a medium-sized, round-topped tree, found most valuable for contrasts. From Japan.

A. dasycarpum (White or Silver Maple). Named from the shining under-surface of its leaves. A large rapid-growing tree.

Acer dasycarpum Wieri laciniatum (Wier's Cut-Leaved Silver Maple). Very graceful and elegant in habit; finely cut leaves. The strong, rapid growth can be cut back, to render it more compact, where the grounds are small.

A. Negundo (Ash-leaved Maple). Of quick growth and irregular, spreading form, improved by close pruning. Leaves pinnate. Also called Box Elder.

A. platanoides (Norway Maple). A large, handsome tree of vigorous growth, with broad, deep green leaves.

A. platanoides Schwedleri (Schwedler's Norway Maple). Purple-leaved Norway Maple; a distinct new, conspicuous variety, with bronze-red or purple foliage.

Acer Pseudo-platanus (Sycamore Maple). A picturesque European tree, with large, shining leaves and smooth bark of a light gray color. The growth is rapid.

A. rubrum (Red or Swamp Maple). Bright red and orange blossoms in the spring and brilliant crimson foliage in autumn. Excellent for moist situations.

A. saccharinum (Rock or Sugar Maple). A stately native American tree of noble form. Leaves are dark green and very handsome, turning brilliant red and orange after frost.

JAPANESE MAPLES

The Japan Maples are of dwarf habit and are varied in their foliage. Some have leaves of rich bright hues and others are deeply cut. Whether planted singly or in groups, they are effective and beautiful.

ACER polymorphum. The most vigorous of the type; forms a small, shrubby tree with various shades of color on the young growth; foliage small, deeply lobed, changing to the most brilliant and gorgeous tints in autumn.

A. var. aureum (Golden Japan Maple). The leaves retain their light yellow color with little variation throughout the summer. One of the best and most effective in a group.

A. var. atropurpureum (Blood-red Japan Maple). The brightest and most constant in color of the red-leaved sorts, and one of the most popular.

A. var. atropurpureum dissectum (Cut-leaved Purple Japan Maple). Branches crimson; leaves finely cut, crimson or dark purple; very fine.

ÆSCULUS (Horse-Chestnut). Popular street and lawn trees, with round, dense heads of deep green leaves, spangled with large flower-clusters in early spring.

Æ. Hippocastanum (European Horse-Chestnut). Flowers in large panicles; white with touches of red.

Æ. Hippocastanum alba flore pleno. Large, white, double flowers.

Æ. Hippocastanum rubicunda. A tree of medium size, with bright red, showy flowers. Very distinct and beautiful when in flower.

BETULA (Birch). The beauty of the Birches lies in their classic grace and elegance, silvery bark, light sweeping branches and airy foliage. They flourish even in the poorest soils and most exposed situations.

B. alba (White Weeping European Birch). Moderate in growth, assuming an elegant drooping habit in four or five years. One of the hardiest and most useful trees in cultivation, growing quickly and withstanding exposure well.

B. atropurpurea. Leaves a rich purple color.

B. pendula laciniata (Cut-leaved Weeping Birch). Famed for its beauty and graceful habit. The growth is tall and slender, yet vigorous, the branches light and drooping and the leaves delicately cut.

CATALPA Bungei (Chinese Catalpa). A curious dwarf that grows but 8 or 10 feet high and twice as broad. Top-grafted on tall stems, it is quite as effective for lawn and terrace decoration as the tender and more expensive bay trees. The great, glossy leaves are laid with odd precision.

C. speciosa. The large heart-shaped leaves of the Catalpas and their showy flower panicles give them quite a tropical appearance. *C. speciosa* is of very rapid growth, flowers earlier than most other sorts, is perfectly hardy and a handsome tree. The wood is very durable and takes a fine polish.

Acer platanoides (Norway Maple) (see page 29)

Upright and Weeping Trees, continued

CERASUS (Cherry). The ornamental race of Cherries grows fast in public favor as its good qualities become better known. The drooping varieties are especially pretty for small grounds.

C. Avium alba plena (Double-flowering Cherry). Clusters of white flowers, as double as little roses, cover the tree thickly in May, transforming it into an object of the greatest beauty.

C. Japonica pendula (Japanese Weeping Cherry). Feathery and graceful, but strong in growth, forming a dense, drooping head; flowers white, single; fruit red; an attractive tree.

CERCIS Canadensis (Judas Tree, or Red-Bud). A small growing tree, covered with delicate pink flowers before the leaves appear.

CHIONANTHUS Virginica (White Fringe Tree). A small hardy, native tree, of rounded outline, blooming in May and June. Flowers clustered, white, narrow-petaled, resembling bunches of pure white silken fringe or lace, drooping in a fragrant mist over the broad leaves.

CLADRASTIS tinctoria. See *Virgilia lutea.*

CORNUS (Dogwood). The Dogwoods flower very early, and their large, conspicuous flower-bracts render them showy objects among other still leafless clumps of trees and shrubs. The shrubs are of graceful form and make a very effective planting—especially when placed in front of larger trees, such as evergreens of solid, deep color.

C. florida (White-flowering Dogwood). Irregular and spreading form. Involucre large, four-petaled, white. In spring, when bursting buds first cast a tinge of verdure through the landscape, its large white flowers are quite showy and effective, making it very desirable.

C. florida flore rubra. A red-flowered form, which blooms when quite young and is very bright and showy. The leaves turn a magnificent crimson in autumn; the flowers are of a rose-red, shading to a lighter hue toward the edges of the petals.

C. florida pendula (Weeping Dogwood). A peculiar variety of weeping tree making a straight, upward leader, while the side branches are gracefully pendulous. The leaves and flowers are like those of the other Dogwoods.

CYTISUS Laburnum (Golden Chain). A small handsome tree or shrub, with smooth, shining foliage and long, drooping racemes of beautiful golden yellow flowers. Blooms in June, after the grand spring inflorescence of other shrubs is over.

FAGUS (Beech). Even while young the Beeches are remarkable for their beauty and with age spread into grand trees. Their leaves are light, glossy green and their habit elegant, particularly in the cut-leaved and weeping forms.

F. sylvatica (European Beech). A tall, noble tree, of slower growth and more compact form than the American; retains its foliage very late, or sometimes all winter; one of the best Beeches for general ornamental planting.

F. sylvatica incisa (Cut-leaved Beech). Light, deeply-cut foliage. Erect and free-growing; of rare beauty and excellence.

F. sylvatica pendula. The straight trunk and the drooping, spreading branches of this tree are hidden under a veil of rich luxuriant foliage, which invests it with wonderful grace.

F. sylvatica purpurea Riversii (Rivers' Smooth-leaved Purple Beech). The best of the Purple Beeches. Compact and symmetrical in shape, with leaves crimson in spring, changing to dark purple as they mature.

Blossoms of White-flowered Dogwood

FRAXINUS (Ash). The Ash trees are all of rapid growth, and quickly form large specimens. They are hardy, ornamental and valuable, and bear lateral racemes of inconspicuous greenish yellow or whitish flowers.

F. Americana (White Ash). A native tree of medium height, with broad, round head and clean trunk.

F. excelsior (European Ash). Tall and rapid-growing, with spreading head, light bark, pinnate leaves and black buds.

F. pendula (Weeping Ash). A good lawn and arbor tree; spreads fast, and requires considerable room.

Purple Beech (see page 31)

GYMNOCLADUS Canadensis (Kentucky Coffee-Tree). An odd tree of medium size, with narrow, pyramidal head. The formation and coloring of the leaves gives the tree an odd tropical effect. Each "leaf" consists of a main stem bearing smaller stems, on which the bluish-green leaflets are borne in regular pairs. The flower are white, in great clusters and the seed-pods are of unique appearance. They are flat, reddish-brown, and hang in good-sized clusters, unopened, all winter.

HALESIA tetraptera (Silver Bell, or Snowdrop Tree). One of our prettiest small native trees. In May the branches are covered with sprays of small white, drooping bells about an inch long.

KOELREUTERIA paniculata. Has panicles of showy yellow flowers a foot long in summer when other tree bloom is scarce; in fall its leaves are richest crimson; in winter the characteristic growth and skyline are particularly striking. A most beautiful small tree.

LARIX (Larch). The Larches are slender, graceful trees, generally of drooping habit.

L. Europaea. Rapid-growing, of elegant pyramidal habit, with small, drooping branchlets of tender, delicate green, deepening toward summer.

LIQUIDAMBAR styraciflua (Sweet Gum or Bilsted). Everywhere justly regarded as one of our finest American trees. The leaves are bright green, glossy and star-shaped, coloring to bright crimson in autumn. Of medium size and moderate growth.

LIRIODENDRON tulipifera (Tulip Tree). Another magnificent native of our forests, with large tulip-like flowers and broad, glossy, fiddle shaped leaves. Tall and pyramidal, and transplant best when small.

THE MAGNOLIAS

The glossy, tropical foliage of the Magnolias, and their splendid, fragrant flower-cups have helped to scatter the race widely wherever it will grow. All Magnolias should be transplanted early in spring, taking care to preserve the fibrous roots, and to protect them from even temporary exposure.

It would be hard to find a finer group of flowering trees than the Magnolias. We have a fine assortment of varieties consisting both of the native and Chinese sorts, giving a fine selection as to form of tree and color of flower.

M. acuminata (Cucumber Magnolia). A tall tree, with creamy yellow flowers and large cucumber-shaped fruits, which turn crimson as they ripen.

Upright and Weeping Trees, continued

Magnolia glauca (Sweet Bay). A small native tree, with shining foliage and very sweet white flowers borne in profusion in May.

M. macrophylla (Great-leaved Magnolia). This is a superb variety, of medium size, bearing white flowers, purple at the base, sweet-scented, from 8 to 10 inches in diameter. The leaves are very large, from 1 foot to 3 feet long and 8 to 10 inches broad, pubescent, white underneath. A very handsome hardy deciduous tree, with smooth white bark. Rare; of rich tropical effect.

M. purpurea. Flower deep purple, with pink throat; a dwarf, bushy variety that blooms at intervals all summer and is very effective.

CHINESE VARIETIES

M. Alexandrina. White with pink blush and large flowers, which come before the leaves appear.

M. conspicua (Chinese White Magnolia). A Chinese species of great beauty. Tree shrub-like while young, but gradually forming a medium-sized tree. Flowers large pure white, numerous, appearing before the leaves.

M. Lennei (Lenne's Magnolia). Blooms in May, and frequently again in late September. Flowers dark rose without and pearly white within. A strong grower, making a grand display.

M. Soulangeana. Cup-shaped white and purple flowers, from 3 to 5 inches across.

M. speciosa. Flowers a little smaller and later than *M. Soulangeana*, otherwise the same.

M. stellata, syn. Halleana. (Hall's Japanese Magnolia). Dwarf and bushy. Semi-double, white star-like flowers, delicate and fragrant.

M. tripetala (Umbrella Tree). A free-growing and somewhat straggling tree, with lanceolate leaves from 1 to 2 feet long and white flowers 4 to 6 inches in diameter, with a slight but not altogether agreeable perfume.

MORUS Tatarica pendula (Teas' Weeping Russian Mulberry). A very graceful weeping tree; foliage handsomely cut, glossy and green. Exceedingly hardy. A most desirable tree for small lawns or cemetery planting.

PLATANUS orientalis (Buttonwood). A valuable tree for city streets; thrives well in any kind of soil and withstands smoke and gas. Remarkably free from

Platanus orientalis, continued

disease and grows to massive proportions. Highly ornamental and graceful.

POPULUS (Poplar). Leaves are glossy and abundant, and all the species grow quickly into trees of fine contour.

P. alba (White Poplar, Silver Abele, etc.). Of rapid growth and spreading habit with large-lobed leaves, silvery beneath.

P. Bolleana. A very compact, upright grower; resembles the Lombardy. Has glossy leaves, green above and silvery beneath. Bark of rich green, giving it a very striking appearance.

Magnolia conspicua

P. fastigiata (Lombardy Poplar). The well-known lofty, spire-like tree; erect and rapid in growth.

P. monolifera (Carolina Poplar). A fine variety of the Poplar. A rapid grower, of erect habit, with large, heart-shaped leaves. It is very useful as a street tree, for which purpose it is extensively planted.

PYRUS Ioensis flore pleno (Bechtel's Double-flowering Crab Apple). A very showy double variety, originating in the West. This is absolutely the handsomest ornamental flowering crab to be had.

Upright and Weeping Trees, continued

QUERCUS (Oak). A kingly race of trees—strong, rugged, towering and majestic. The loftier species are suited only to large grounds, but for small yards there are less aspiring sorts.

Q. coccinea (Scarlet Oak). Its foliage in the fall is of a sparkling red, making a a beautiful object in the landscape. Grows tall, pyramidal in shape, and thrives well under all conditions.

Q. macrocarpa (Mossy-Cup, or Bur Oak). A noble tree, of spreading form and with large, beautiful deeply lobed leaves from 4 to 15 inches long and from 2 to 4 inches broad. The cup of the acorn is fringed around the edge in an odd way.

Q. palustris (Pin Oak). One of the quickest growing of Oaks, reaching a height of 60 feet, and forming a desirable addition to the park. Generally regarded as one of the best of the Oak family.

Q. Robur (The Royal English Oak). Well known; spreading and slow-growing.

Q. rubra (Red Oak). One of the largest-leaved American species. A rapid grower, and a valuable street tree.

Q. cerris (Turkey Oak). A very handsome South European species, of rapid symmetrical growth; foliage finely lobed and deeply cut; leaves change to brown in autumn, and persist during a great part of the winter. Fine for the lawn.

SALISBURIA adiantifolia (Ginkgo, or Maidenhair Tree). One of the most beautiful of lawn trees. A native of Japan. Of medium size, rapid growth, and rich, glossy fern-like foliage. Rare, elegant.

SALIX (Willow). The Willow's soft, light masses of foliage are very effective; trees beautiful, hardy and rapid-growing.

S. Babylonica (Babylonian Weeping Willow). A large tree; branches drooping.

S. Caprea pendula (Kilmarnock Weeping Willow). Without any pruning, they form handsome umbrella-shaped heads.

Teas' Weeping Mulberry (see page 33)

TILIA (Linden or Basswood). The Lindens grow rapidly to large size, and their rounded, luxuriant masses of foliage make them very much sought for as street and shade trees.

T. Europaea (European Linden). Of pyramidal form. Flowers fragrant; leaves large and dense.

T. Americana (American Linden or Basswood). Large cordate leaves and inconspicuous, delicately fragrant flowers

T. argentea (Silver-leaved Linden). Rather smaller than the American. The leaves are downy and white underneath.

ULMUS (Elm). A rival of the oak, with more stately grace, but less rugged strength and picturesqueness.

U. Americana (American White Elm). The noble spreading tree of our own forests; grows very large.

VIRGILIA lutea (*Cladrastis tinctoria;* Yellowwood). Medium height, with smooth, white bark, graceful branches and drooping racemes of white flowers. One of the most attractive lawn trees. 3 to 4 feet.

Berberis Thunbergii

THE DECIDUOUS SHRUBS

The shrubs described in the following list are fine for hedges, screens, etc., for planting about the house or veranda, and for many other purposes aside from those to which shrubs are usually put.

ALTHÆA. See Hibiscus.

AMYGDALUS (Double Pink and White-flowering Almond). Pretty dwarf shrub, with double pink or white flowers growing thickly along the stem; early flowering. Two varieties.

A. mollis. The flowers of this Azalea are large and showy and of various bright colors, like the rhododendrons. The shrub is hardy, and blooms early in the spring.

A. pontica. Largely planted in beds and masses for the decoration of lawns and pleasure grounds. The shrub is from 3 to 4 feet high, the flowers gay and sweet-scented.

BERBERIS Canadensis (American Barberry). Native; flowers yellow, succeeded by bright red berries in the autumn.

B. Thunbergii. One of the most effective plants in autumn, after most other deciduous shrubs are bare. Its small oval leaves then assume superb crimson hues and the slender branches droop beneath their load of bright red berries, which hang on till late in the winter. The bush is as thorny as a gooseberry and is one of the best plants for ornamental hedges. Very attractive when untrimmed.

B. purpurea. Rich purple foliage and fruit Striking and ornamental.

CALYCANTHUS floridus (Sweet-scented Shrub, Carolina Allspice). Native; hardy. Leaves large and glossy; flowers double and chocolate-colored, with a rich, quaint fragrance.

CLETHRA alnifolia (Sweet Pepper Bush). Low-growing; flowers in long spikes, clear white and fragrant, opening in August.

COLUTEA arborescens. A free-growing and free-flowering shrub; well adapted for extensive shrubberies.

CORNUS (Dogwood). Some of this family of plants are desirable for their handsome, variegated foliage, some for their showy bloom, others for their bright red bark, which greatly enlivens the summer or winter landscape.

C. sanguinea (Red-branched Dogwood). A native species with clusters of large yellow flowers; very conspicuous and ornamental in winter, when the bark is blood-red. Shows off beautifully against the snow.

C. Sibirica (Siberian Dogwood). Similar to *C. sanguinea* in color of bark, but a different shade of red. Flowers white, borne in clusters followed by pale blue berries. Both of the varieties mentiond are very desirable for grouping.

C. spaethi (Golden Dogwood). A new variety; foliage broadly margined with bright yellow.

Deciduous Shrubs, continued

CORYLUS avellana purpurea (Purple-leaved Filbert). A very conspicuous shrub, with large purple leaves. Distinct and fine. Produces good fruit.

CRATAEGUS. Thorn.

C. coccinea (Scarlet-Fruited Thorn). A fine native variety; blooms in May, producing white blossoms, succeeded by scarlet fruit; large foliage.

C. oxyacantha var. coccinea flore pleno (Paul's Double Scarlet Thorn). A tree of fine habit, with rich, luxuriant foliage; flowers much larger than the double red, of a deep crimson color, with scarlet shade; very double.

C. oxyacantha var. flore pleno (Double White Thorn). A very attractive variety on account of both foliage and flowers; the flowers are small, double white.

DAPHNE Mezereum. A small shrub with erect branches and clusters of pink flowers, borne in March, before those of any other shrubs open. A native of northern Europe. Exceedingly pretty.

DIERVILLA, or **WEIGELA.** The flowers of the Weigelas are large and trumpet-shaped and vary through different shades and markings from pure white to red. They bloom in June after the lilacs are gone.

Diervilla, Abel Carriere. Bright rose. A choice new variety.

D. candida. Of vigorous growth, with large, pure white flowers, produced from June until autumn.

D., Eva Rathke. One of the finest of the Diervillas. Of erect form and vigorous habit. In spring and early summer it is covered with a profusion of deep carmine-red flowers of large size.

D. rosea. A rare Chinese shrub; erect and rounded; bright rose-colored flowers.

D. rosea amabilis. Large leaves and pink flowers borne in autumn.

D. rosea aurea variegata (Variegated Weigela). A neat, dwarf shrub, valuable for the clearly defined variegation of green, yellow and pink in its leaves; very effective and useful; flowers similar to *D. Rosea*, delicate rose and pink. One of the finest variegated-leaved shrubs.

D. Van Houttei. Deep crimson flowers that cover the plant.

DEUTZIA. The most beautiful and deservedly popular of all our flowering shrubs. They are hardy, of fine habit, and flower profusely in the latter part of June, the racemes being long and graceful.

D. candidissima. Of recent introduction. Flowers pure white, large; very desirable.

Deutzia, Pride of Rochester

D. crenata flore alba pleno (Double White-flowering Deutzia).

D. crenata, Pride of Rochester. Flowers larger than the above; white and double, the outer petals being flushed with rose.

D. gracilis. A pretty dwarf form, with pure white flowers that open quite early.

D. Lemoinei. Lemoine's Deutzia. May. Snow-white flowers borne abundantly along the slender branches.

D. scabra (Rough-leaved Deutzia). Flowers white, bell-shaped, in clusters.

ELAEAGNUS longipes (Japanese Thorn). Foliage glossy, silvery tinge

Hydrangea paniculata grandiflora

Deciduous Shrubs, continued

Elæagnus longipes, continued
underneath; bark covered with peculiar brown spots which remain all winter. The bush is covered in July with large bright red berries, which are edible and of a sprightly and agreeable flavor. Foliage persists until late autumn.

EUONYMUS (Burning Bush, Strawberry or Spindle Tree). These shrubs have crimson fruits, with scarlet arils and dark green leaves and stems; foliage of attractive form, assuming brilliant shades in autumn. Planted against a clump of evergreens, they give brilliant effects. Three varieties—*E. Americana*, *E. atropurpurea* and *E. Europæa*.

EXOCHORDA grandiflora. An elegant Chinese shrub, with large, pure white flowers, open in May.

FORSYTHIA (Golden Bell). Shrubs with deep green leaves and bright yellow flowers all along the slender stems; very early-flowering. Three varieties—*F. Fortunei*, *F. suspensa* and *F. viridissima*.

HIBISCUS (Althea, or Rose of Sharon). An old and well-known shrub, that blooms in autumn, when other flowers are scarce. Double and single flowers; best varieties and colors.

H. alba plena. Double white, with crimson center.

H. elegantissima. Double; white, shaded with rose.

H. foliis variegatis. A conspicuous variegated-leaved variety. Double purple flowers; one of the finest variegated shrubs.

H., var. Jeanne d'Arc. Pure white; very full, and superior to any double white known.

H., Lady Stanley. One of the finest variegated flowering varieties.

Hibiscus Leopoldii plena. Large; double, flesh-colored flowers, shaded with rose; foliage laciniated.

H. rubis. The darkest red of the single Altheas.

H. speciosa. Double; rosy pink; very fine.

H. violacea. Large flowered reddish violet.

HYDRANGEA hortensis (Garden Hydrangea). Showy and well known. Flowerheads large, round, bright pink, variable; may be changed in color by mixing iron filings with the soil. Needs protection.

H. Otaksa. A dwarf variety which produces immense flowers of a pink tinge. Requires protection during the winter.

H. paniculata grandiflora. Autumn-flowering; as hardy as an oak; flowerheads enormous, pure white, borne in great profusion and turning to pink and remaining in perfection until late fall. One of the best hardy shrubs.

H., Thomas Hogg. Pure white; a free bloomer of dwarf habit. A good variety for growing in pots or tubs.

ITEA Virginica. A small bush, 3 to 4 feet high, with erect spikes of white flowers in early summer.

KERRIA (Corchorus). These are quite hardy, although occasionally injured by the winter. Attractive bright yellow flowers.

K. Japonica fl. pl. Double-flowering Corchorus. An erect grower, with pale green bark and very double yellow flowers. Blooms profusely from the last of June until autumn, with showy globular flowers.

LIGUSTRUM Ibota (Chinese Privet). One of the most beautiful of the Privets both in flower and leaf. Hardier than the California and will not freeze out. Makes a handsome and practical hedge.

Spiræa Thunbergii

Deciduous Shrubs, continued

Ligustrum ovalifolium (California Privet). Popular hedge plant, forming beautiful live fences of great density. Untrimmed, it will grow from 8 to 12 feet high; it has attractive, glossy dark green foliage, not subject to insects.

LONICERA Ledebourii (Upright Honeysuckle). A distinct California variety of the Bush Honeysuckle, with red flowers in May.

L. Tatarica (Tartarian Honeysuckle). Red or pinkish flowers, followed by orange-scarlet berries.

L. Tatarica grandiflora. Large, bright red flowers, striped with white.

PAEONIA MOUTAN (Tree Peony). Distinct from the herbaceous race, forming showy shrubs of medium size, with enormous flowers of different colors; a strikingly effective shrub. Best varieties

PHILADELPHUS (Mock Orange). All varieties of this group flower in June after the Weigela. If left to develop naturally, all but the dwarf sorts would grow from 12 to 15 feet high, but can be kept in compact shape by pruning. They bear their fragrant white flowers profusely and are general favorites.

P. coronarius. Flowers white, borne in rather dense clusters, highly perfumed; very early in opening.

P. foliis aureis (Golden-leaved). Leaves bright yellow all season—a pretty contrast for purple-leaved shrubs.

Philadelphus grandiflorus. Flowers in clusters, pure white and showy, late, slightly fragrant.

PRUNUS Pissardii (Purple-leaved Plum). An elegant, tree-like shrub, with leaves of lustrous crimson when young, changing to purple with age. The bright color is more constant than in any other shrub of its class. Flowers small, white, single, abundant in spring.

P. triloba. Double-flowering Plum. May. A strong growing, hardy shrub, with delicate pink double flowers and slender branches. Very ornamental.

PYRUS Japonica. A very showy and popular shrub, which blooms profusely in early spring; flowers dazzling scarlet pink and white. Should be in every collection of shrubs; also makes an excellent and very showy hedge.

RHUS cotinus (Purple Fringe, or Smoke Tree). So called from the cloud of purple, filmy, hair-like flowers, which cover it thickly in summer. Of spreading habit; 10 to 12 feet high.

R. Copallina (Dwarf Sumac). Shining Sumach. Beautiful shining green foliage changing to rich crimson in autumn. Greenish yellow flowers in August.

R. glabra laciniata (Cut-leaved Sumac). Leaves glossy and fern-like, turning to scarlet in autumn.

SPIRAEA (Meadow Sweet). Low shrubs, remarkable for their profuse blossoming and easy culture. Neat, rounded habit.

Deciduous Shrubs, continued

Spiræa Bumalda. Dwarf, vigorous; blooms in midsummer and autumn. Flowers rose colored; leaves narrow.

S. opulifolia aurea (Golden-leaved Spirea). Conspicuous and bright in effect. Flowers white, double; leaves yellow-tinted.

S. prunifolia flore pleno (Plum-leaved Spirea, or Bridal Wreath). Flowers like double daisies, growing in long, thick wreaths. Blooms for a long time in May.

S. Reevesi (Lance-leaved Spirea). Narrow leaves; plant covered thickly with handsome, large, round white flower clusters.

S. Thunbergii (Thunberg's Spirea). Dwarf early flowering, and valued for forcing.

S. Van Houttei. Undoubtedly the best of all Spireas. In early June the plant is covered with a mass of large white flowers.

S. Watereri (Anthony Waterer Spirea). It is of dwarf, dense habit, bearing a profusion of pink-rose flowers of a shade peculiar to itself, blooming the entire summer. This is a decided acquisition, and one of the most desirable varieties.

SYRINGA (Lilac). Lilacs of some sort are found in almost every garden, so that their beauty and general characteristics are well known. They bloom in May.

S. Josikæa. A fine late bloomer, with bluish purple flowers; less fragrant than some others.

S. Persica (Persian Lilac). A medium-sized shrub, with small leaves and large panicles of small, fragrant, bright purple flowers.

S. Persica alba. Delicate white flowers, shaded with purple.

S. villosa. A new Japanese species, which blooms two or three weeks after other Lilacs are done. Flowers in large,

Syringa villosa, continued

spreading panicles of a delicate lilac shade. Scarce and valuable.

S. vulgaris. The common purple Lilac.

S. vulgaris, Ludwig Spaeth. A new hybrid form introduced from Germany. The flowers and clusters are very large, fine, and dark in color.

S. vulgaris, Emilie Lemoine. A new variety with double, white flowers.

S. vulgaris, Marie Le Graye. Superb, creamy white flower-plumes of great size; bush dwarf. Extra choice and valuable for forcing.

S. vulgaris, Souvenir de Louis Spaeth. Most distinct and beautiful variety; trusses immense, very compact florets, very large; deep purplish red.

S. vulgaris, President Grevy. A beautiful new variety, with large, double flowers in clusters 10 inches long and blue in color.

TAMARIX Africana. Leaves graceful and feathery like the asparagus. Toward the close of May it bears pink flowers.

T. Japonica plumosa. Foliage more feathery and full; pink flowers in August

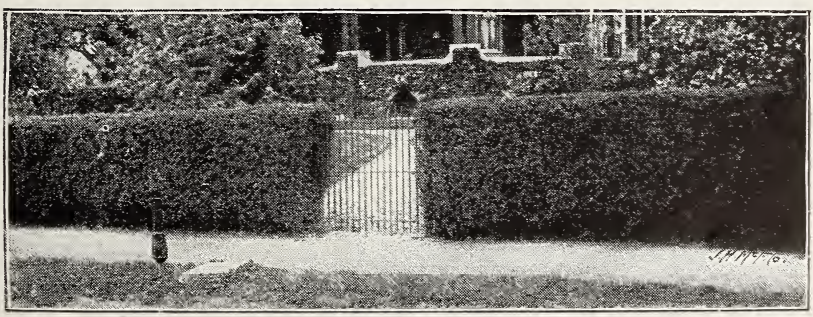
VIBURNUM Opulus (Cranberry Tree). White flowers in summer, with attractive red berries similar to cranberries in autumn.

V. Opulus sterilis (American Snowball). Very beautiful and popular; flowers snowy white, borne in large balls in early summer.

V. plicatum (Japan Snowball). A new variety from North China. Of moderate growth, with handsome plicated leaves and globular heads of pure white flowers. It surpasses the old variety in several respects. Its habit is better, flowers whiter and more delicate. One of the most valuable flowering shrubs.

THE HEDGE PLANTS (DESCRIBED ELSEWHERE)

DECIDUOUS. California Privet, Purple Barberry, Thunberg's Barberry.
EVERGREEN. Arborvitæ, Hemlock Spruce, Norway Spruce, Retinospora.



Hedge of Ligustrum ovalifolium (California Privet) (see page 38)

Spruce Trees along roadside on our grounds

THE EVERGREENS

The all-the-year-round color of the evergreens is the quality most valuable in them, while their use as sheltering windbreaks cannot be overestimated. The prevailing color which they give to their surroundings is deep-toned, but if the bright-leaved sorts, now plentiful, are planted among somber ones, they greatly enliven the effect.

Evergreen trees and shrubs can be planted later in the season than those which are deciduous. May is, perhaps, the best time for doing this work in spring; August and September are the months for autumn planting.

ABIES (Spruce). The Spruces have fine needle-shaped leaves which clothe the twigs evenly or in ranks. They include many of our best evergreens; all are hardy, and transplant readily.

A. alba (White Spruce). Of medium size, pyramidal; leaves silver-gray.

A. balsamea (Balsam Fir). The useful common Fir, of subtle and health-giving odor; a medium-sized tree.

A. Canadensis (Hemlock Spruce). The graceful common Hemlock, with delicate, dark foliage.

ABIES Douglasii (Douglas' Fir). A large, conical tree, with smooth bark and light green foliage, glaucous beneath. A rapid grower, but not so hardy as some others.

A. excelsa (Norway Spruce). Tall and rapid-growing; useful for hedges, shelter belts, etc.

A. Nordmanniana (Nordmann's Silver Fir). Majestic and symmetrical in form, with massive, plumy branches of dark green

Abies Nordmanniana, continued

foliage, showing its light under-surface in silvery ripples. One of handsomest.

A. pectinata (European Silver Fir). A very stately, symmetrical, pyramidal tree; perfectly hardy and long-lived; the foliage is dark green, bright and glossy even through the coldest winter.

A. pungens (*Picea pungens;* Colorado Blue Spruce). A tree of medium size, with rich steel or sage-blue tints on its glossy foliage. One of the hardiest and most beautiful of all evergreens.

JUNIPERUS. This genus includes a number of trees, some of which are known as Cedars. The leaves are awl-shaped, and set in whorls.

J. Hibernica (Irish Juniper). The trees form a tall, dense cone of silvery green.

J. Sabina (Savin Juniper). Spreading or procumbent shrubs, rarely with erect stem. Branchlets rather slender. Leaves needle-shaped, usually dark green.

Evergreens, continued

Juniperus Virginiana (Red, or Virginia Cedar). A native form, very common in New England. Tapering, bright, rich green foliage. Bark on trunk and branches reddish brown. Thrives in dry soil.

PINUS (Pine). The hardy, robust habit of the Pine, and soft, plume-like effects produced by its long, slender leaflets, make it of great service in general planting.

P. Austriaca (Austrian Pine). Strong, spreading and rapid-growing; of especial value.

P. excelsa (Bhotan Pine). Resembles the White Pine. Leaves are more silvery, graceful and pendulous. A noble tree.

P. Mughus (Dwarf Mugho Pine). One of the best dwarf bushy forms.

P. Strobus (White or Weymouth Pine). A beautiful native of lofty growth, but of fine shape even when small; foliage silvery green.

P. sylvestris (Scotch Pine). A native European species of Pine, with strong branches and short, stiff, bluish green foliage. Very hardy.

RETINOSPORA (Japan Cypress). The Retinosporas are unusually attractive on account of their delicacy and the varieties shown in the tints of their foliage. They afford a pleasing contrast in groups of evergreens. They are very desirable in all ornamental planting, especially in producing formal effects; also for planting in window gardens and vases. They are of rather recent introduction, and are a valuable acquisition.

R. filifera aurea (Golden Thread-branched Retinospora). Foliage is of a bright golden yellow, forming a pleasant contrast to other varieties. Plant is dwarf in habit and pyramidal in outline with drooping branches.

Retinospora plumosa. Dwarf, dense-growing; branchlets slender and feathery.

R. plumosa aurea. Gold-tipped leaves, bright all the year.

R. obtusa. A fine large tree, with dense fan-like foliage of light green color. A native of Japan, where it reaches a height of from 70 to 100 feet.

R. squarrosa. A low, dense bush, with very short leaves of a sage-green in summer and silvery bronze tint in winter. A thickly branched singular, pretty and effective variety.

R. squarrosa Veitchii (Veitch's Retinospora). A handsome, erect, glaucous tree; of medium size, striking appearance and color; valuable to add variety and contrast to a collection. Most of the Retinosporas need shearing occasionally while small, to give them a dense, symmetrical habit.

TAXUS (Yew). The small, dense leafage of the Yews makes it possible to trim them into almost any form. They are not entirely hardy.

T. baccata (English Yew). Tall-growing and thick branched.

T. baccata aurea (Golden Yew). Leaves margined with yellow.

THUYA (Arborvitæ). The Arborvitæs vary greatly in habit of growth and color. They have many uses, being well suited for hedges, screens, house decoration and formal gardens. They are symmetrical in growth, of dense foliage with flattened frond-like leaves.

T., var. nana aurea. A dwarf, rounded form that is decidedly pretty and of a golden color.

T., var. elegantissima. Rollinson's Golden. A very handsome golden kind, upright in habit, and in the winter changing to an attractive bronze.

Young Evergreens growing at Willowdale Nurseries

Fine specimens of Norway Spruce, like these, are a specialty with us

Evergreens, continued

Thuya occidentalis (American Arborvitæ). Sometimes called White Cedar.

T. occidentalis aurea (Douglas' Golden Arborvitæ). Bright yellow foliage.

Abies pungens (Colorado Blue Spruce)

Thuya occidentalis compacta (Parsons' Compact Arborvitæ). Dwarf, dense, handsome; 3 or 4 feet.

T. occidentalis globosa (Globe Arborvitæ). Natural evergreen ball; hardy.

T. occidentalis pyramidalis (Pyramidal Arborvitæ). A choice, hardy, columnar tree that grows from 20 to 30 feet high.

T. occidentalis Sibirica (Siberian Arborvitæ). Compact, pyramidal and constant in color; hedges and screens.

T. var., Geo. Peabody (Golden Arborvitæ). Handsomest golden Arborvitæ, and cannot be too highly recommended.

T. var. Vervæneana. Tall; tips light golden, shading a soft green.

T. orientalis. Chinese or Eastern Arborvitæs; need protection.

T. orientalis nana aurea. A dwarf rounded form; pretty and golden.

T. orientalis elegantissima. Rollinson Golden. Handsome, upright, green, changing bronze in winter.

EVERGREEN SHRUBS

AZALEA amœna. Very attractive.

BUXUS (Box). Best dwarf and tall sorts.

DAPHNE cneorum. Fragrant white flowers, bright berries.

KALMIA latifolia (Mountain Laurel, Calico Bush). Flowers vary white to rose.

RHODODENDRON (Rose Bay, Laurel). Elegant in masses and groups. Best hardy English Hybrids, Catawbiense, Seedlings and *Rhododendron maximum.*

YUCCA filamentosa. Creamy white, bell-shaped flowers.

The Rose

Everybody loves roses, but there is too much of a disposition on the part of most people, even those who cultivate other flowers in their gardens, to "stand off and admire at a distance" the roses that they might grow and enjoy for themselves.

The following list of roses has been carefully revised, and includes those standard varieties that will succeed best in the Eastern States. A collection of these makes rose culture easy and successful.

We are favorably located to produce rose bushes of quality, and the varieties we offer here are bound to give satisfaction.

The ensuing lists include a very complete collection; should you desire any not to be found in these pages, however, we will be glad to secure the same for you upon short notice.

HARDY GARDEN ROSES

These are a favorite and entirely hardy race of Roses, not, however, perpetual in bloom, but yielding a second crop of flowers in autumn. Give them a rich, sunny situation, and prune in the weak shoots severely, leaving the stronger ones of greater length.

Alfred Colomb. Brilliant crimson.

American Beauty. Rich pink, with carmine shadings; very large.

Anne de Diesbach. Fine carmine; fragrant.

Baron de Bonstettin. Large and full; rich dark crimson; profuse bloomer.

Baroness Rothschild. Light pink, beautifully cupped.

Clio. Light, satiny, rose-colored; great beauty and fragrance; showy, free bloomer.

Coquette des Alpes. One of the finest; large, full, finely formed flowers; pure white faintly tinged with pale blush; profuse bloomer.

Eugene Furst. Velvety crimson; extra large and beautiful. Very fragrant.

Frau Karl Druschki. Pure white; exquisite texture. Large and fragrant.

General Jacqueminot. Brilliant crimson, large, buds handsome.

General Washington. Red, shaded with crimson; large, very full, flat form; profuse bloomer.

La Reine. Bright rose; large and fragrant; crimped foliage.

Louis Van Houtte. Crimson-maroon; full, fragrant and free-blooming.

Mabel Morrison. White, tinged with blush; good form and free habit.

Madame Gabriel Luizet. A large, pink rose, very beautiful; worthy attention.

Madame Plantier. A pure white, summer-blooming rose, of good size and form; of the best for hedges and massing.

Magna Charta. Full, globular pink, with carmine shadings and delightful fragrance. Plant strong, and blooms freely.

Hardy Garden Roses, continued

Margaret Dickson. New; pure white, with rosy flesh center; large shell-shaped petals; beautiful.

Marshall P. Wilder. Cherry carmine, large; fragrant; a strong, fine, free-blooming old Rose.

Mrs. John Laing. Soft pink; fragrant, full and finely formed.

Paul Neyron. A very large, deep pink Rose, of good form; free-blooming; desirable for the garden.

Persian Yellow. The favorite old Austrian Rose, with small, bright yellow nearly full flowers.

Prince Camille de Rohan. Dark velvety crimson; spreading habit; one of the handsomest of Roses.

Rodocanachi. Light rose, shaded with silver; distinct and handsome. Extra fine. Long stems.

Ulrich Brunner. Bright cherry red, finely formed; vigorous.

TEA AND EVERBLOOMING ROSES

The Everblooming Roses are tenderer than other sorts, and require more careful winter protection. They are the most fragrant and delicately beautiful of all Roses, excelling as cut-flowers.

Agrippina (Bengal). Rich, deep crimson; fine in bud and moderately full; valuable for bedding.

Bride. Pure white; large, beautifully formed; fragrant; free-blooming; admirably adapted for forcing.

Bridesmaid. A sport from Mermet, and considered a better Rose because of its deeper, clearer pink and its constancy of color.

Catherine Mermet. One of the finest forcing Teas. Soft, silvery flesh color; large, full and well formed; fragrant; very beautiful in bud.

Etoile de France. A vigorous grower, with dark foliage. Flowers full and double, borne on strong upright shoots in profusion; color, rich velvety crimson.

Etoile de Lyon. A beautiful light yellow Rose, similar to Perle des Jardins in size, form and fullness.

Frances E. Willard. Pure snow-white, as befits the name. The fragrance is delicious and the Roses are borne on long sturdy stems. Great bloomer.

Gloire de Dijon. Usually trained as a climbing Rose. Flowers large and globular; a glowing combination of salmon, orange and buff. A very useful Rose; probably the hardiest Tea.

Helen Gould. One of the finest of the Hardy Ever-blooming Roses. Extra large, double, delightfully fragrant crimson flowers on strong stems. Vigorous, prolific.

Hermosa (Bourbon). Bright rose-colored flowers, of medium size, constant bloomer; bushy habit.

Kaiserin Augusta Victoria. A superb white Rose, of almost perfect form in flower and bud; large, full and double. Elegant fragrance; the plant strong, with handsome foliage and a continual show of blossoms.

Basket of Tea Roses

Lamarque (Noisette). A beautiful climbing Rose for the conservatory or South. Flowers white, sulphur center, clustered full.

La Princesse Vera. An excellent variety for general planting; flowers very double and full; color pale rose, changing to salmon-rose, shaded with carmine.

Maddalena Scalarandis. Extra large in bud and flower. Rich, dark pink shaded crimson. Very prolific and steady bloomer. Vigorous and hardy.

Mad. Lambard. A first-class Rose for garden planting or pot culture; habit of growth is vigorous; very free bloomer. A beautiful shade of rosy bronze, changing to salmon and fawn, shaded with carmine. Very sweet-scented.

Tea and Other Everblooming Roses, continued

Mad. de Watteville (The Tulip Rose). Salmon-white, bordered with bright rose; buds long, never opening wide; fragrant.

Mad. Welche. A grand Everblooming Rose of remarkable beauty; large, full, globular flowers, and long, finely pointed buds. Color soft yellow, clouded with pale rose; very fragrant; blooms all season.

Marechal Niel (Noisette). The finest yellow Rose. Rich yellow, large, full, globular, fragrant. Of uncertain growth.

Marie Guillot. White, tinged with yellow; splendid form.

Marie van Houtte. Blooms continually, flowers large, well-shaped, sweet-scented. It succeeds anywhere and in any soil; an exceedingly strong, vigorous grower. Creamy white, with the outer petals outlined bright rose.

Mrs. B. R. Cant. Bright, rosy pink, very full and double; of exquisite fragrance. Splendid bedding Rose; in bloom from early summer to frost.

Papa Gontier. Rose, shaded with yellow with crimson reverse of petals; large, semi-double, fragrant; free in growth and bloom.

Perle des Jardins. The popular yellow forcing rose; large, full and fragrant; a fine variety.

Safrano. An old and fine Rose; fawn, with rose shadings; very beautiful in the bud; very free.

Souvenir de la Malmaison (Bourbon). Delicate flesh color, with fawn tintings; large, fine and full; rich foliage.

Sunrise. Dark, peachy red, shaded with orange and crimson. Exquisitely tea-scented. Extra large in size and very double. A wonderful bloomer.

Sunset. Amber-yellow, with darker center; similar to Perle des Jardins in form, size and general habit.

HYBRID TEAS

The Hybrid Tea Rose is the result of crossing Tea and Hybrid Perpetual Roses, and adds to the ever-blooming habit of one parent much of the hardy constitution and freedom of bloom of the other.

Cardinal. Large, finely formed flowers, very double and full; rich, deep, dark red with center tinted with gold. Exquisite tea fragrance.

Duchess of Albany. A sport from La France and like it in many respects, but of a deeper, more even tint of pink and more finished in shape.

Gruss an Teplitz. One of the finest crimson Teas grown. Dark rich, velvety crimson, shading to brilliant red. Flowers are large, full and of delicious perfume.

La France. One of the sweetest and most beautiful of all Roses. Delicate pink; large, full, rounded; constant bloomer.

Mad. Caroline Testout. Bright, clear pink; flowers larger than those of La France and plant more robust.

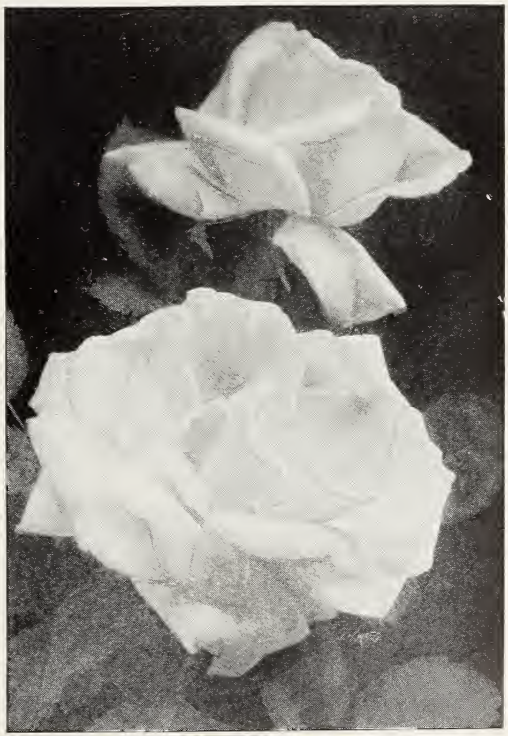
Magnafrano. Beautiful crimson-scarlet; very full and delightfully fragrant. Bush is a strong, upright grower, and prolific.

Meteor. Rich, velvety crimson; constant in color and habit; fine for forcing or bedding.

Pres. Carnot. Flower large, of exquisite shape, with heavy, shell-like petals; buds long and pointed, and borne on stiff, erect stems; color delicate, rosy-flesh, shaded deeper at the center.

Richmond. Splendid large, double flowers of fine texture. Bush is a vigorous grower and bears in great profusion.

Souv. de Wootton. Deep red; very fragrant; free-flowering.



Frau Karl Druschki Rose (see page 43)

Moss Roses

A class of Roses prized chiefly for their beautiful buds. They are entirely hardy, but are sometimes attacked by mildew, and require close pruning and high culture to do themselves justice.

Blanche Moreau. Pure white, clustered, well-mossed buds; blooms profusely in autumn.

Common Moss. An old favorite, with beautiful pale pink buds.

Crested Moss. Deep pink buds, with mossy fringe and crest; quite fragrant. Plant healthy and free from mildew.

Comtesse de Murinais. White, tinged with blush.

Gracilis. Deep pink buds, daintily mossed; exquisite; most beautiful of family.

Princess Adelaide. Pretty buds of pale rose; foliage blotched or variegated.

New Climbing Moss Rose

CUMBERLAND BELLE. A distinctly new and novel form of the beautiful Moss Rose family. A sport from the exquisite Princess Adelaide and possesses the charm of its parent with a strong climbing habit. The flowers are of a soft silver-rose, and very fragrant. The buds are beautifully mossed and exquisite.

Hardy Running Roses

These Roses are much used for covering pillars, trellises and porches, for which purpose they are admirably adapted. The They are hardy without protection and require little or no pruning.

Baltimore Belle. Pale blush. A standard prairie Rose.

Crimson Rambler. A vigorous, rapid grower, making shoots from 8 to 10 feet high during a season. The flowers are borne in immense trusses, pyramidal in form and in color rich, glowing crimson.

Dorothy Perkins. One of the hardiest of the climbers. Flowers are borne in immense clusters and are of shell-pink, running to deep rose; large pointed buds.

Gem of the Prairies. Rosy red, occasionally blotched with white; large flat flowers, slightly fragrant.

Jules Margottin. Carmine-rose; pretty in both bud and open flower.

May Queen. Large, double flowers, of a clear, bright pink, and borne in great profusion.

Philadelphia Rambler. A great improvement on the Crimson, but like it in habit. Flowers larger, richer red, more profuse in bloom, and two weeks earlier, holding its color to the last.

Queen Alexandra. Brilliant clear pink shading to blush. Flowers borne in clusters, covering entire bush. Hardy, rampant grower.

Queen of the Prairies. Bright rose, with frequent markings of white; leaves large, deeply serrated.

Yellow Rambler. Light canary-yellow.

Ruby Queen. Beautiful rich ruby-red with clear white center, making a handsome porch decoration.

Rugosa Roses

The large, handsome, wrinkled foliage of these Roses and their great showy, single pink or white flowers have made them exceedingly popular for a number of uses. They form handsome, compact bushes, made very attractive all season by continuous fine flower-clusters and large scarlet fruits. For groups and hedges they are greatly in demand.

Rosa rugosa rubra. Beautiful shade of dark pink.

Rosa rugosa alba. Clear, brilliant white.

The New Rose, Baby Rambler

A cross between the Crimson Rambler and Gloire des Polyanthus, combining the prolific flowering qualities of the latter, with the color of Crimson Rambler (clear brilliant ruby-rose). The bush is vigorous and absolutely hardy, reaching a height of 24 to 30 inches. Begins blooming in early June and continues until late frost. Fine for bedding.

Running, or Trailing Roses

(Wichuraiana class)

Gardenia (Hardy Marechal Niel). Exquisite, resembling Marechal Niel. Perfectly double and borne in great profusion.

Jersey Beauty. Beautiful single flowers, pale yellow in color and delightfully fragrant. Profuse and constant bloomer.

Evergreen Gem. Buff-yellow flowers, double, with rich sweetbrier fragrance.

Polyantha Roses

A pretty and interesting group of Japanese Roses, with the marked characteristics of blooming in panicles, small flowers and leaves, dwarf, somewhat slender growth continual blooming and hardiness.

Cecile Brunner. Salmon-pink, with deeper center, delicately scented.

Clothilde Soupert. Pearl-white, with rosy pink center; of medium size and very double, with beautifully imbricated petals.

Mosella (Yellow Soupert). Combines the form and size of the Tea Roses with the free-flowering qualities and branching habit of the Polyanthas. Grand for summer, bedding or for pot culture. Light yellow at center; creamy white at edge.

Pink Soupert. Free-blooming, producing cluster after cluster to deep, rich pink flowers. One of the best hardy pink bedding roses.

The Hardy Ornamental Vines

AKEBIA quinata. From Japan. Flowers fragrant, purplish chocolate, opening in June; leaves almost evergreen; fruit ornamental.

AMPELOPSIS quinquefolia. The well-known Virginia Creeper, used for covering walls, arbors and the like.

A. Veitchii (Japan Ivy). Clings closely to walls by means of aërial rootlets, clothing them with a sheet of delicate green foliage, which turns to vivid scarlet and crimson in autumn; berries purplish.

ARISTOLOCHIA sipho (Pipe Vine). Very rapid-growing; leaves immense; flowers yellowish brown, of curious shape.

BIGNONIA grandiflora (Trumpet Creeper). An elegant woody vine, with finely divided, glossy foliage and large trumpet-shaped flowers, bright scarlet.

B. radicans (Scarlet Trumpet Vine). An old-time favorite. Flowers perfect trumpet-shaped, bright scarlet; a rapid grower. One of the finest vines for covering old stumps, fences, trellises, etc. Blooms almost all summer.

CLEMATIS. The Clematises are perfectly hardy, and very easy to cultivate, requiring a good, rich soil and some attention in pruning and training. They bloom from May to October, producing during that period an abundance of handsome flowers of all shades of color.

C. coccinea. Bears handsome, bright scarlet flowers in July. Very good.

C. Alexandra. One of the continuous blooming sorts of real merit. The flowers are large and of a pale reddish violet color.

C. Henryi. Very large flowers, creamy white; free in growth and bloom.

C. Jackmani. One of the best large-flowering varieties; rich, dark, velvety purple.

C. Lanuginosa. Pale lavender flowers of great beauty, borne in profusion. Very hardy.

C. paniculata. The flowers are pure or cream-white, star-shaped, about an inch in diameter, and borne in clusters on stiff stems from 4 to 6 inches long in the axil of nearly every leaf. From mid-August until late September it is a cool fragrant bank of white.

C. Ramona. A seedling of the Jackmani type; one of the strongest growers; flowers lavender-blue. Invariably gives satisfaction.

C. Virginiana. Our native Clematis, which blossoms into wreaths of white flowers in July and August; one of the most popular of the family.

HEDERA Helix. Better known by every one as the beautiful hardy English Ivy, which is so popular in both the old world and the new.

LONICERA brachypoda aureo-reticulata (Japan Golden or Sunset Honeysuckle). Flowers pure white, sweet, in pretty clusters; leaves roundish, richly marked yellow; a perennial beauty.

L. Halleana (Hall's Japan Honeysuckle), In bloom all season; flowers white. changing to yellow, fragrant; borne in beautiful sprays.

L. Japonica (Chinese Twining Honeysuckle). Leaves purplish, almost persistent; flowers bright and fragrant; blooms in summer and fall.

VINCA Major (Evergreen Myrtle). A beautiful trailer, with large, dark, glossy leaves and soft, sky-blue flowers.

V. Minor. The common species, with smaller flowers and leaves. Very useful for vases, or to carpet beneath trees where grass will not grow.

WISTARIA Sinensis. Flowers are a lovely combination of violet, shading into lilac and white; in long, pendulous racemes.

W. Sinensis alba. Similar to *W. Sinensis* except that the flowers are white; forms a fine contrast to that variety.

The Ornamental Grasses

Eulalia gracillima
E. Japonica
E. Japonica variegata
Eulalia Japonica Zebrina
Erianthus Ravennæ
Gynerium argenteum
Phalaris Arundinacea

The Bulbs, Plants, Etc.

FALL PLANTING.—Hyacinths, assorted; Narcissus, assorted; Tulips, assorted; Crocus, assorted.

SPRING PLANTING.—These are tender varieties and should be taken up in the fall and placed in a dry cellar to keep from freezing. Cannas, assorted; Dahlias, assorted, Gladioli, assorted; Tuberoses.

HARDY PERENNIALS.—These may be planted either spring or fall and with little care it is possible to have a display of bloom year after year. Herbaceous Peonies, pink, red and white; Lilies; Golden Glow; Phlox, assorted; Japan Iris, assorted; German Iris, assorted; Pompon Chrysanthemums.

SPRAYING HINTS

Your fruit orchards, your ornamental trees and vines, your roses—almost everything, in fact, that grows, needs an occasional spraying to make it succeed as it should; the following directions and calendar will prove helpful.

It is always the best economy to buy a *reliable* spray pump—one large enough and good enough to do the necessary work. Such an outfit will operate easier, and prove cheaper in the end, than an inferior outfit on which a little money was "saved" at first.

If you do not care to trouble about mixing your own solutions, you can buy them already made up, from dealers almost anywhere. These preparations are concentrated and are made ready for use by mixing with water. Bordeaux Mixture and insecticides of all kinds, remedies for San José Scale, etc., can be obtained in concentrated form.

FORMULAS

Bordeaux Mixture. Formula (the "normal" or 1.6 per cent): Copper sulphate, six pounds; quicklime (unslaked), four pounds; water, forty-five gallons.

If air-slaked lime is used in place of the fresh article, double the amount should be used; but the fresh is much more reliable. By combining the copper and lime it is found that the copper sulphate may be used more freely and with less injury than if used alone, and that it will adhere a long time to the foliage.

To make the Bordeaux mixture, dissolve the copper in hot water (or if placed in a coarse sack or basket, and suspended in a tub of cold water, it will dissolve in two or three hours, while if put in cold water on the bottom of a tub or vessel, it remains undissolved for a long time), then in a separate tub slake the lime thoroughly, and when both are cold, pour the two together, stirring constantly. Dilute with water to make forty-five or fifty gallons of liquid. Before using, the mixture should be strained through a burlap or fine wire strainer to take out the coarse particles of lime.

If insects are found attacking the plants or trees to be treated for fungous growth, Paris green may be added to the Bordeaux mixture at the rate of one pound to 100 or 200 gallons of the mixture, and the lime will prevent this large quantity of Paris green from burning the foliage and two pests be destroyed by one spraying. In spraying peach trees, use about one-third more water.

Kerosene Emulsion. Formula: One-half pound common bar soap, two gallons of water, two gallons of common kerosene. Dissolve the soap in hot water; while still hot, add the kerosene and stir vigorously until a soft soap or cream-like substance is formed. When cold, dilute with water to make from ten to twenty-five gallons of liquid. This is used for the destruction of sucking insects, like aphides (plant lice), scale insects, etc. Always use soft water.

Paris Green alone can be safely used only at the rate of one pound to 250 to 300 gallons of water; if, however, two pounds of lime be slaked in water and added to twenty-five gallons of water, at this rate one pound of Paris Green can be used in 100 gallons of water without injury to the foliage.

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THE HANDY SPRAY CALENDAR. A Condensed Table of Diseases and Remedies

Prepared by Howard Evarts Weed, M.S., formerly Entomologist and Horticulturist, Mississippi Experiment Station. Reproduced by permission of the Deming Co., Spray Pump Mfgrs., Salem, O.

Plant	Insects and Diseases	Remedy	First Application	Second Application	Third Application	Remarks
APPLE	San José Scale	Lime-sulphur or soluble oils, as recommended.	Early in November.	In February, same as first.	For summer treatment, use 10 per cent kerosene.	San José scale cannot be destroyed in a single treatment, but is easily kept in check by a little effort. If only a few trees of an orchard are affected, burn them off.
	Oyster-shell and Scurfy Scale, Woolly Aphis.	Soluble oils as recommended.	Use when young first hatch in early spring.	Repeat in ten days.		If Woolly Aphis is present on roots, dip stock in 1-15 solution of recommended prepared oil compound.
	Codling Moth, Bud Moth, Apple Scab.	Bordeaux and arsenate of lead mixed.	Early spring, before the buds swell.	As soon as blossoms fall.	Two weeks later.	A fourth application will pay. If bitter rot is present, a fifth application should be made.
CHERRY	Black Aphis and Rot.	Kerosene, soluble oils as recommended.	Soluble oils as recommended as soon as plant lice are noticed. Bordeaux when fruit has set.	Repeat if needed.	Repeat if needed.	Cherry Aphis is one of the hardest insects to kill and the kerosene should be used as strong as possible, but not strong enough to kill the foliage.
GRAPE	Rot and Mildew.	Bordeaux.	When buds first swell.	Repeat in ten days.	Repeat in ten days.	Fourth application is needed. Use arsenate of lead if flea beetles are present.
PEACH	Rot and Leaf-Curl.	Bordeaux.	In March, before buds swell.	After blossoms fall.	Repeat in two weeks.	Best to add arsenate of lead for any biting insects which may be present.
PEAR	Codling Moth and Scab.	Bordeaux, with arsenate of lead added.	Before blossoms open.	After blossoms fall.	Repeat two weeks later.	The fire blight of the pear cannot be controlled by spraying.
PLUM	Curculio Rot and Blight.	Bordeaux, with arsenate of lead added.	After blossoms fall.	Repeat in ten days.	Recommended solution if Aphis is present.	If scale insects are present, use lime-sulphur or recommended compound.
CURRANT and GOOSEBERRY	Mildew, worms, Aphis	Bordeaux.	When leaves appear.	Ten days later, Bordeaux. Hellebore for worms; quassia and tobacco for Aphis.	Repeat second when necessary.	Watch the plants closely in spring and begin spraying as soon as worms are discovered.
RASPBERRY, BLACKBERRY and DEWBERRY	Fungous diseases.	Bordeaux.	When buds begin to swell.	When leaves are opening, Bordeaux. Cut out all rusted canes.	Two weeks later (when not in flower) repeat second.	Dilute the mixture to half the strength given in formula—100 gallons of water instead of 50.

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